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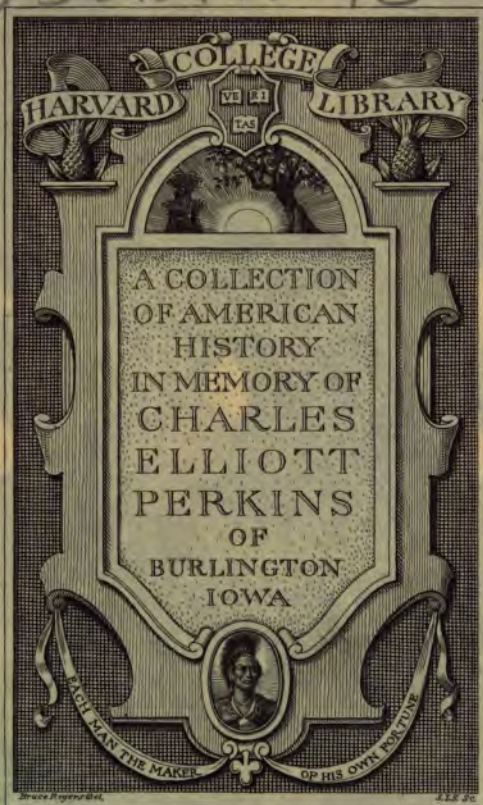
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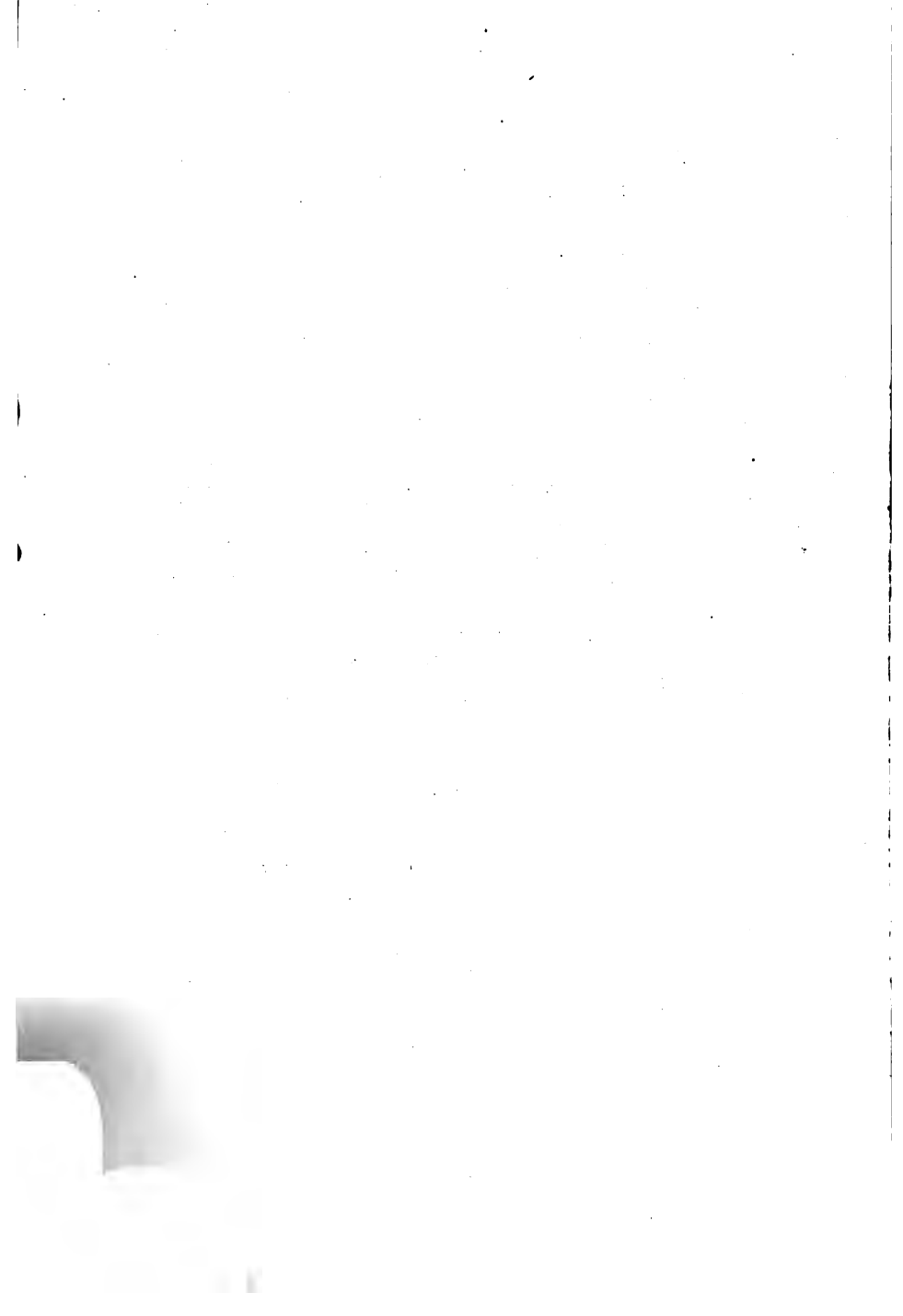
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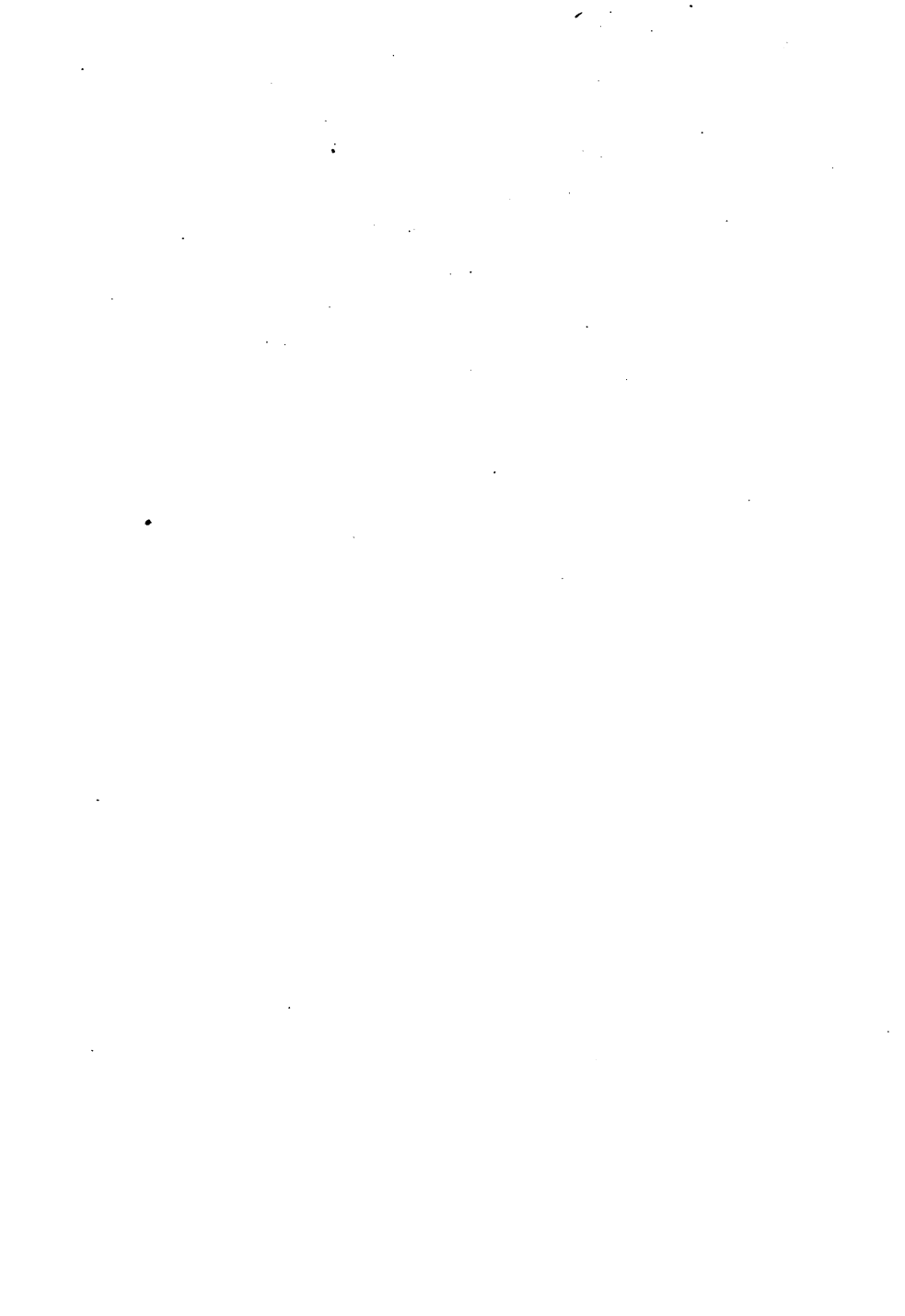






AUGUSTUS CHARLES BERNAYS

A MEMOIR



AUGUSTUS CHARLES BERNAYS

A MEMOIR

BY

THEKLA BERNAYS
=

FAIRNESS + FEARLESSNESS = FORCE

—A. C. BERNAYS

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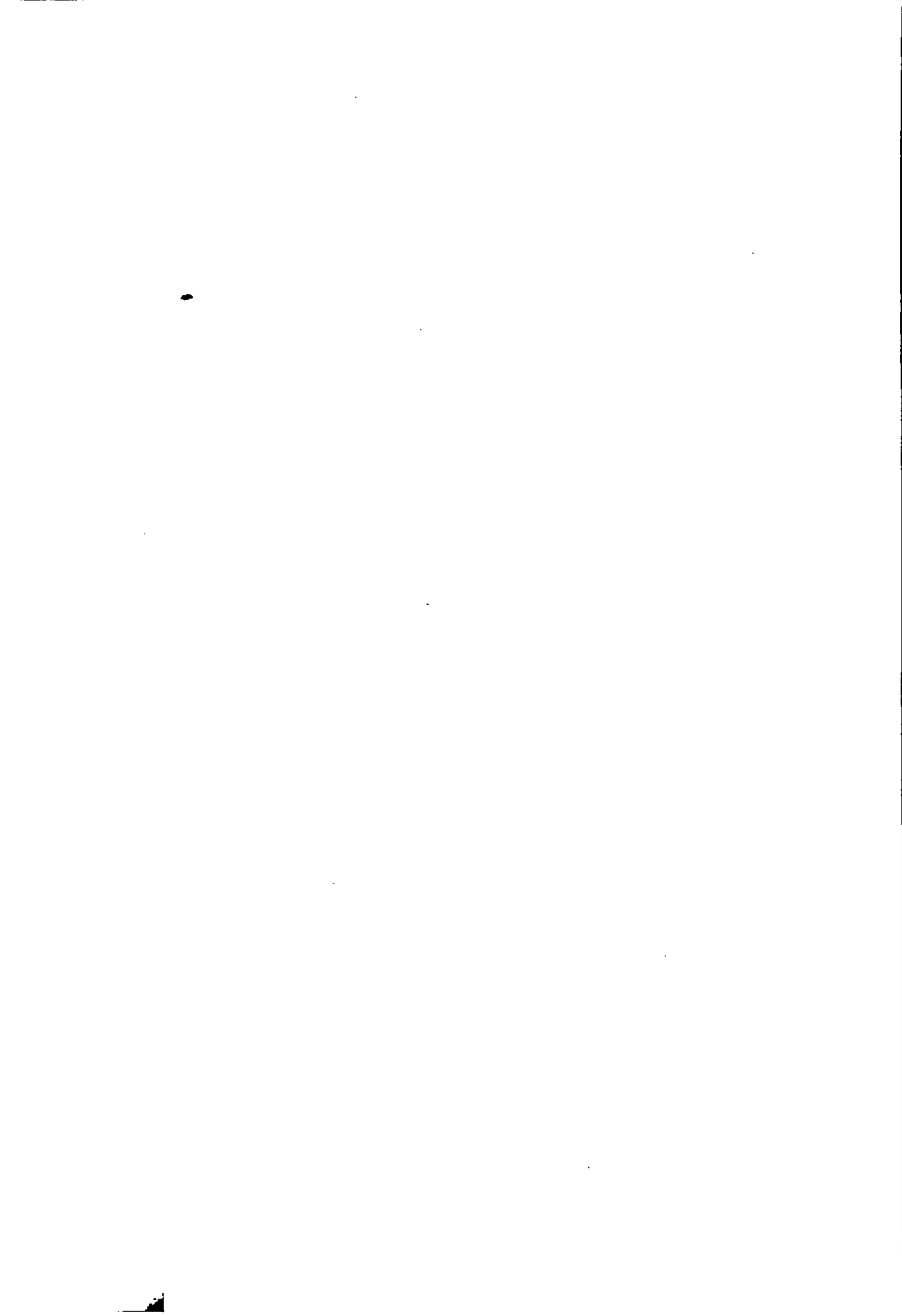
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TO THE LOYAL BAND OF ASSISTANTS, PUPILS,
FELLOW-WORKERS, AND FRIENDS OF
AUGUSTUS CHARLES BERNAYS,
AS WELL AS TO THOSE OF YOUNGER GENERATIONS
WHO HOLD DEAR HIS IDEALS,
THIS BRIEF RECITAL OF HIS ACTIVITY
IS INSCRIBED.

The triumph of evolution, in which the thought of ages culminated, was the great event of his boyhood. This world-view, eagerly accepted by the foremost men of science, but confirmed his intuition of kinship with all living beings, and, suffusing his entire mentality, stimulated him to his significant researches in morphology. The crowning glory, however, of his short, full career, notwithstanding his skill, his pioneership, and his achievement in surgery, lies in his having not only grasped, but lived, the spiritual meaning of evolution—brotherliness.

Du führst die Reihe der Lebendigen
Vor mir vorbei, und lehrst mich meine Brüder
Im stillen Busch, in Luft, und Wasser kennen.
— GOETHE, Faust I.



ACKNOWLEDGMENT.

The author wishes to express her warmest thanks to the many faithful friends of her brother who generously and unselfishly lent their assistance in the delicate and difficult task of writing this little story of his life.

To Geheimrat Max Fürbringer, professor of anatomy at the University of Heidelberg, she is deeply indebted for his beautiful tribute to the friend of his youth, which constitutes Chapter V of the Memoir. In no less a degree her gratitude is due to Dr. G. G. Cottam, of Sioux Falls, S. D., who shunned no labor to search out and arrange in chronological order the scattered articles and pamphlets of Dr. Bernays for the bibliography appended to this volume.

Dr. Willard Bartlett, Dr. C. Barck, Dr. W. W. Graves, Dr. Rothstein, and others supplied some of the incidents and anecdotes narrated, and encouraged the writer by their genuine interest and sympathy.

T. B.



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AUGUSTUS CHARLES BERNAYS

A MEMOIR

CHAPTER I

DESCENT, BIRTH, BABYHOOD

A name, though it be but a superficial matter, yet carrieth much impression and enchantment.—*Lord Bacon.*

In children a great curiousness is well,

Who have themselves to learn and all the world.

—*Tennyson.*

On the paternal side Augustus Charles Bernays was descended from a Hebrew family of considerable distinction. At least such distinction belongs to the family as may be verified by him who will take the trouble to look up the name in British, American, German, and Jewish encyclopedias. The family, ranging from a tiny town in Hesse-Darmstadt outward over all the countries of Europe, settling in four of the five continents of our globe, has gathered force and volume in a rather astonishing degree, considering that it is not much more

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than a hundred years since two rabbis — brothers — in Mayence on the Rhine concocted and adopted the name. These two, our great-grandfather and great-granduncle, traced their descent through a long line of rabbis centuries back. Pious Israelites, I have been told, still carry a picture of one of our remote ancestors pasted inside the covers of their prayer books because the prototype of the image at the time of the Crusades, by extraordinary courage and sagacity, protected his flock when fanatic Christians threatened violence, in one of the periodic rages that seized them, against the race who gave them their gods, their form of worship, and their rule of conduct.

Previous to the advent of Napoleon, Jews on the Rhine had been known only by their given names, to which, for purposes of identification, the name of the town whence they hailed was added. Thus our great-great-grandfather was called Baer Neustädtel — Neustädtel being a small Hessian village near Mayence. Napoleon decreed that the Jews adopt family names. So, in memory of their father, Baer Neustädtel, our great-grandfather, and his brother, by dropping the latter part of the town's name and by running the remaining syllables together — Baerneus — then changing the orthography to the French, Bernays, created the name.

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From these two men, Jacob and Isaac Bernays, have sprung all the Bernayses of Germany, those in England and its dependencies and colonies — Canada, Australia, India — those in Belgium, Austria, and Russia, and those in the United States. A virile and a versatile tribe, their activities have been scientific, educational, philosophical, philological, journalistic, political, literary, and, in a few instances, commercial — the latter never with notable success if success means the accumulation of vast wealth.

Some remained in the fold of Israel as orthodox, convinced Jews; others belong to the later, the "reformed," Judaism. Some are orthodox Christians, and some have indeed become men of importance in the Anglican church. Those who made England their home intermarried with Anglo-Saxons until in the third and fourth generation the racial type of Judea is disappearing. A Bernays was Episcopal bishop of Calcutta, and one branch of our family owns the living at Great Stanmore, Middlesex, England. Other men of note in Great Britain of our name were Albert Bernays, a brilliant and versatile man, professor of chemistry for many years at St. Thomas' Hospital, London, author of many chemical works; Edwin Arthur Bernays, long in the service of the Admiralty as a civil engineer

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and builder of the Chatham docks; Leopold Bernays, first incumbent of Great Stanmore, who at the age of nineteen made the first translation of the second part of Goethe's *Faust* into English; Lewis Adolphus Bernays, who early emigrated and was for forty years clerk of the Parliament of Queensland, Australia, and distinguished himself by his work in botany and horticulture.

In Germany the great Hakkam of Hamburg, Isaac Bernays, is held in pious remembrance by all good Jews for the wonderful service he rendered his race by broadening their educational system and by introducing the sermon in German into the synagogue in order to bring his flock into closer touch with the people among whom they lived. He it was who, together with other wise Israelites, was consulted by Napoleon in regard to legislation for his race in the famous code that bears the usurper's name. His two sons, Jacob and Michael Bernays, are known to students the world over — the former for his philological and philosophical writings on the ancient classics, the latter for his significant work on the clarifying of the text of such modern writers as Goethe, Schiller, and Shakespeare.

A most remarkable German novel on Jewish family life, "Schief-Levinche, oder Polnische Wirthschaft," was written by another Isaac Bernays, of

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Hamburg, about the middle of the last century. It is even now reprinted from time to time, and ranks second only to Heine's gripping fragment, "Der Rabbi von Bacharach," in its poignant tragi-comic appeal.

Others of the name who have lived noteworthy lives are Heinrich Bernays, for years prosecuting attorney of the Reichsland at Colmar, Alsatia, author of legal and historic works; Guillaume Bernays, likewise a brilliant lawyer and historian, of Antwerp in Belgium, who was so strangely and foully murdered at Brussels by the brothers Preller in 1872.

Younger talent is helping, I am told, to keep the lamp of science and scholarship trimmed by good work in German and English universities, adding new luster all the time to our name. So that, if the history of our family were written, it would go to corroborate Galton and the men of his school in the proof they are bringing "that, in the determination of character, nature is of greater significance than nurture—that the strength of the stone depends primarily on the quarry from which it came, not upon the height to which it is polished, nor upon the elegance of the colonnade into which it is built."

What has impressed and touched my brother and myself more than the intellectual prowess of our

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tribe is that, now and then, in far-away places where we traveled, we met persons who showed the strongest emotion at mention of our name, and told of having met relatives of ours, unknown to us, of a high sense of honor and responsibility and of exceeding generosity.

To come now to the particular branch of the Bernays family from which sprang the subject of this memoir, our grandfather, Clemens Bernays, was one of the many sons of Jacob Bernays, of Mayence. Great-grandfather was liberal in his views. Close friendship united him with the Prince-Bishop of Mayence, who bestowed upon his Jewish friend's many sons an array of names, than which nothing could have been more Christian — Lucian, Emanuel, Clemens, Pius, Christian, etc. These grew up with the breath of the French Revolution in their nostrils and the longing for liberty in their blood. Clemens, our grandfather, married the divorced wife of a Jewish rabbi, Therese Ehlinger, née Creizenach (a family likewise noted for scholarship — having produced Orientalists and historians of note). Grandmother had also chafed under the rigidity of the ancient law, and is said to have deliberately forced her first husband, the rabbi, to divorce her for conduct unbecoming a Jewish woman. Every day, the story goes, she seated herself in

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the most conspicuous window of the dwelling in Frankfort on the Main, where she then lived, with long hair unbound and hanging luxuriantly over her shoulders — a most heinous offense in a rabbi's wife, at a time when all married women in Judea went shorn and cowled. She obtained her liberty from the unloved husband by this insubordination to the law, and afterward married our grandfather, to whom she bore six sons and two daughters. I fancy it was her very intrepidity and originality of action which attracted our grandfather, who was himself of an imperious, vivacious nature, a free-thinker, restless under the tyranny of moribund laws and conventions. He, as well as rebellious grandmother, did not, however, formally abandon the old faith. They lie at rest in the Jewish cemetery at Frankenthal, but they doubtless felt, as Heine afterward expressed it, that "Judaism is not a religion, but a calamity," which evidently they desired their progeny to escape. Consequently all their children were christened in the Lutheran faith and therein confirmed, but they grew up none the less free-thinkers, outwardly conforming, as they were obliged to do, to the conventions of Protestantism, but inwardly unconvinced. Grandfather was so liberal, or perhaps so indifferent, that when he resided in the small Catholic town of Oggersheim,

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his children attended Catholic schools, and he permitted Charles Louis, his second son, who had a fine soprano voice, to serve mass at the Catholic church from his ninth to his thirteenth year, singing each Sunday, "*Domine salvum fac regem*," as I have often heard uncle smilingly tell.

Our father was the sixth son of his parents, and but eleven years old when grandfather died. Much of the family fortune acquired in the grain commission business by grandfather had been spent before our father came to man's estate, and he was obliged to earn most of the funds needed for his medical studies. This he accomplished by first becoming a pharmacist and earning his living as a pharmacist's assistant, afterward, when studying in England, eking out his scant means by giving instruction in French and German.

On the mother's side there is French Huguenot blood and German. Great-grandfather Sérís Bertrand, when he emigrated from his native Provence to the region known as the Taunus in Germany, could speak nothing but French, nor ever learned to use the language of his adopted land other than brokenly. This did not, however, deter him from wooing and winning a German maiden, Ernestine Minnigerode, who gave him four daughters and two sons. Our grandmother Louise was the eldest

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child, and at the age of seventeen married a handsome and wealthy ironmaster of Westphalia, Friedrich Döring. But grandfather Döring was a poor manager — some have said a spendthrift. He ran through his fortune, at last leaving his wife and children — seven in number — to be brought up by the Bertrands. Our mother, Minna Döring, was his youngest child. She, like her elder sisters, was carefully prepared to go to England as a governess. She was privately instructed by her mother and her aunts, charming and accomplished women, whose letters are even now a delight to read. One of grandmother's sisters, Frau Amalie Prinz, of Neuwied, was indeed, from all accounts and records, a truly exceptional woman. Our mother was indebted to her for generous help during her bringing up, and turned to her for advice and sympathy as long as grandaunt Amalie lived.

Our parents met at Langenschwalbach, where granduncle Fritz Bertrand was the incumbent of one of the three pharmacies our great-grandfather had established in the Taunus country. The old Frenchman, our ancestor, must have been clever as well as industrious and energetic, coming as an impecunious boy into a strange land and acquiring so considerable a fortune as three pharmacies then represented. The "Apotheken" in Germany were

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then, as they still are, concessions from the government, so that, competition not being excessive, they are, if well conducted, lucrative.

Granduncle Fritz' wife was a Frenchwoman, grandaunt Emilie, née Praule, from all accounts a woman of culture and spirit and much intellectual charm. Our mother was indebted to her for her proficiency in French, acquired in long visits to the "Apotheke," where French was the language of the house.

For a year our father, George Bernays, was "Gehilfe" (assistant) to uncle Fritz, and seems to have lost no time in making love to his employer's pretty niece. When she left her native country to take a position in a girl's school at St. Mary's Hall, Brighton, where two of her elder sisters were already teaching, she was not formally betrothed, but there was an understanding between her and George Bernays that they would soon again meet in England.

Our father promptly completed his medical studies in St. Thomas' Hospital, England, and, with the promise from Minna Döring that she would become his wife as soon as he had made a home for her in the United States, he departed for that country. In Highland, Madison County, Illinois, his elder brother, Charles Louis, had been settled

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for several years, and it was there he at first located, and in a year's time had prepared a tiny home for his bride.

Our mother, accompanied by her brother Henry, a pharmacist trained in the Langenschwalbach "Apotheke," arrived in the United States in the late autumn of 1853, and on the fifth of November — Guy Fawkes Day they always called it — our parents were married in St. Louis at the house of Henry Börnstein, the well-known journalist and theatrical manager. Immediately after the wedding breakfast the young couple, accompanied by Mrs. Börnstein, entered a carriage and drove to their new home in Highland, a tiny dovecote covered with climbers. Uncle Charles and his wife, whom we always called aunt Pepi — using the Austrian abbreviation for her name, Josephine — cordially received the bride and loyally stood by her in the trials and vicissitudes that were soon to come to her in the mere protoplasm of a community that Highland then was.

On October 13, 1854, the subject of this sketch, Augustus Charles Bernays, was born in the little vine-covered cottage at Highland. The terrible suffering and anxiety for her husband which came to the young mother immediately after the birth of her baby are described in a letter of her own dated

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December 30, 1854, and addressed to aunt Amalie, of Neuwied. The young mother wrote:

The very first day my heart feels a little lighter I want to tell you something of our fortunes during the past months. There will, alas, be little to relate except a long story of pain and heartache. Verily I should not have believed that after such dreadful suffering and anxiety one could have the courage to live on. George has had typhoid fever and for many, many days was not expected to live, and, after the crisis was over and his life no longer hung in the balance, we were for two days and two nights in the most horrible fear that he had lost his mind. Even as I write these words I shudder at what they imply. Oh, dear aunt, I can not find words for what I felt, but I believe you can imagine what I suffered. Truly, human beings can bear much. I know I did not show courage in those terrible days, but, indeed, I wonder that I lived through them at all. Even now that he is better and his reason has returned—but for isolated attacks—I dare not be joyful; I mean I can not give myself up to gladness as I should like to. My poor darling little son, too, survived all that agony, and does not even seem much the worse for the misery of his parents. At the very saddest time, strange to say, he began to smile. Sometimes, when I sat a moment by his cradle and the child smiled at me so sweetly, while George in the adjoining room was raving in wildest delirium, I felt as if my heart were breaking. When George began to be ill, you see, I was still too weak to walk, for I had to keep my bed after my confinement for eight weeks. Something, it seems, had gone wrong, which, the doctors said, would adjust itself by rest in bed. So, when I first tried to get up, my legs had grown so weak I could neither stand upon my feet nor walk. I am much better now; still, I can not stand up for long, nor walk fast, but I am sure I shall

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soon be entirely well. I often wonder what would have happened had we lived alone—I mean without relatives near by—in some American town. Charles Louis has been most faithful and devoted. He and Jacob (another of the Bernays brothers who had arrived in Highland in the fall of that year) were with George alternately night and day—during the worst time, both of them. This is the first night I shall be alone—I mean without either of the brothers—with George. The maid sleeps in the adjoining room, however, and helps me wait on him and the baby. In his illness George liked best to have his brother Charles Louis with him. He asked for him constantly, which I thought most natural, for I, too, felt heartened when he but entered the room, just as your entrance used to give me courage when mother was ill in the old days at home. Pepi and Malchen (Jacob's wife) helped take care of the baby while I was still unable to walk.

January 2d. I have not had time to resume writing till today. George and the baby keep me busy all day, and at night I am dead tired. The unrest of the past weeks has kept me from getting back my strength, but at last I think we are really on the road to convalescence. George is out of bed nearly all day, but still very, very weak, nervously irritated and frightfully emaciated. He keeps me in hot water a good deal because he refuses to be careful of himself. He even went to the drug store today to help Henry, and he is very much the worse this evening for that indiscretion. Before he was ill, too, he never would take the slightest care of his health. He was just hustling and working himself into a fever all the time—it made one ill to see him. I wish you would read him a good lecture some time on this subject. How glad I shall be, once everything is all right with us again. Our little boy is so sweet, and we have hardly had a chance to enjoy him. He will soon be three months old. When he was born he was a wee mite of a creature, but he has grown quite a little, and he chatters (in his own lan-

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guage) and laughs all the time. You can hardly conceive of the revolution the coming of the little one has brought about in our household. You just ought to see the living-room, with what a lot of heterogeneous articles it is crowded. The little fellow behaves very well, and hardly ever cries. Often he lies awake in his cradle for hours, laughing and crowing and playing with his hands. You are quite right in thinking that I have changed somewhat since the baby came. The child is my one joy, my entire happiness. All the many different desires I used to have are swallowed up by the one that the little one may live and thrive. Of going back to Europe I never think now. I should be quite satisfied to remain always in America. Only I do wish you and mother and all the rest of the dear ones in Germany could see our little boy.

The little boy did live and thrive, and was in his parents' eyes—as is the traditional and unalterable right and privilege of all babies, especially the first-born—the dearest, and prettiest, and cleverest of babies. On the authority of his parents as well as that of more remote relations, it is here somewhat hesitatingly related that he began to talk—real words—when he was but eight months old. My father told me that little August, from the first, employed the article together with the noun, quite at variance with the usages current in ordinary babydom. He was taught German first, and so said, “die Kuh,” “das Pferd,” instead of merely, “Kuh,” “Pferd.” Likewise—and that statement comes from old Highland people not re-



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lated — he pronounced entire sentences, and very accurately, when not more than eighteen months old, a tiny mite of a youngster just able to toddle. From the time he was able to think — and with him something like thought began in the cradle — he was full of mischievous pranks and devices. He soon learned what little needs of his would bring mamma to him at once, and before he could stand on his feet would often make her come in vain and then laugh at her, full of joy in the success of his ruse.

In the lives of most people of importance there is a gypsy prophecy which tallies — or is made to tally, willy-nilly — with after-events. So there might be with regard to the subject of this memoir, could the stiff-necked memory of the recorder be made to yield a trifle to the love of the supernatural. My father was wont to tell how, returning one evening at dusk to his little cottage in Highland after it had come to hold a second baby (the writer of these pages), he saw an old gypsy woman standing in an imperious pose on the steps of the porch, where his frightened wife sat in a rocking-chair, having gathered both her little ones into her lap. Pointing to August with a bony brown finger, the gypsy was saying, "He shall be a wanderer over all the lands of the earth; he shall be a great

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rogue among women." Here my father, incensed at the fright the old hag was giving his wife, roughly ordered her off the premises. She went, but in going turned to hurl curses and prophecies of evil at the tiny baby in its mother's arms. My father never would tell the exact nature of these imprecations against me. Whatever they were, they do not seem to have been verified any more than the fate she foretold for August.

In letters of a later date, up to the time he was five years old, August is always referred to as "wild," as well as extraordinarily quick and bright. Small and slight, with very little hands and feet, he is described as of alarming activity and curiosity. Unconcern for dignity and disregard of authority were early misdemeanors. Aunt Amalie, with her huge common sense and appreciation of the humorous, enjoyed, as she tells in one of her letters, seeing the wee boy approach all kinds of "Respects-personen" (dignitaries) on a perfect footing of equality. He made them stand and deliver answers to his questions with a self-possessed directness and cool insistence to which these high and mighties were by no means accustomed.

Aunt Amalie made acquaintance with her little grandnephew and niece sooner than was anticipated. When August was but two years and I but a few

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months old a violent epidemic of whooping-cough was decimating the babies of Highland. When my life was despaired of, only an ocean voyage holding out a forlorn hope of saving me, my father precipitately resolved to abandon his home in Highland and his practice in order to give his child the one chance of life. It seems that a few whiffs of ocean air did instantly ameliorate our condition, and when we landed at Bremen my father knew that his babies were safe. August had fully recovered almost on embarking, and was able to furnish the passengers of the steamer with some amusing interruptions to the monotony of the trip. My mother had a little story of this voyage she used to tell, with an arching of her fine brows and a repressed smile, on occasions when she wished to reprimand August for lack of consideration at table. In those patriarchal days steamers were less sumptuously appointed and the company less fastidious than now, so that on promise of good behavior little August was allowed to dine at the table with the grown-ups. He was "good" for a day or two, and spoke only when addressed. But one day, seeing a large dish of asparagus being brought in, he forgot promises and manners, and with big, shining eyes, in his high, clear voice sang out, "Der Bub möcht' alle Spargelköpfe haben" ("The boy"

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— so he called himself — “ would like to have all the tips of the asparagus ”). Our mother did not live to cure him, nor did aught else subsequently cure him, of the desire for a lion’s share of the best that was to be had. It is only fair, however, to say that when in after-life he got the “ tips of the asparagus, ” as he frequently did, he very generously shared them with others.

My father, finding himself on the other side of the Atlantic, determined to remain for some time and perfect himself in certain specialties of his profession in order to be more thoroughly equipped for practice in the city of St. Louis, on which he intended to enter on his return to the United States. He established a modest little home for his family in Würzburg, while our mother with the babies was visiting aunt Amalie Prinz in Neuwied. With Scanzoni, Bamberger, and others he studied up-to-date gynecology and obstetrics for several semesters, repairing to Berlin later to take a course in ophthalmology with von Gräfe.

In Würzburg a third child, another son, Clemens, was born, leaving our mother in a rather delicate state of health, a thing not to be wondered at. Three babies in four years, slender means, and a future by no means safeguarded could scarcely invigorate the never robust, nervous system of the

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young mother. So, when my father in 1859 was ready for the hazard of establishing himself in St. Louis, he thought best to leave his wife and babies for a time in the care of her mother in Ladenburg, a tiny town near Heidelberg, where grandmother Döring's sister Charlotte was married to the Protestant clergyman of the place, Pfarrer Carl Joseph. My mother's eldest sister, Louise, had joined our family at Würzburg after the birth of Clemens. She became our "Tantele" (little aunt), and remained a member of our household until her death in Zürich in 1898.

The wee tots thrived in the pretty country of the Palatinate. To be sure, we lived in a very, very modest cottage with grandmother, but we had the run of uncle Joseph's big garden and orchard by the church, and the attention of all the grown-ups. My mother, after my father's departure, went at once to take the beneficent waters of Langenschwalbach and soon regained her health. Of course she visited at the "Apotheke," where she had spent so much of her girlhood. She had taken August with her, and from faded and crumpled old letters I resurrected years after, out of an old chest at Ladenburg, I gather that the vivacity and inquisitiveness of "Minna's little son" was a source of much diversion to granduncle Fritz and grandaunt Emilie.

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A pharmacy, with its many contrivances, bottles, instruments, and odors, was a wonderful playground for the wide-awake child of four. He followed uncle Fritz, the letters say, like a diminutive shadow the livelong day, trotting up and down and to and fro, from cellar to garret and from store-room to sales-room, gazing with big eyes, and examining with tiny hands everything he was allowed to touch, and questioning, incessantly questioning, about the names and uses of the objects he saw.

Just before we were to join our father in St. Louis in the fall of 1860 my mother, at the earnest request of dear old uncle Joseph, consented to have August and me christened. The ceremony had been omitted in Highland because of the generally pagan atmosphere there and also because the manners of the Illinois clergy of those days displeased our dainty and fastidious mother. To the end of her life she did not entirely relinquish the faith in which she had been brought up, though she rarely went to church and in nowise opposed my father in his candid agnosticism. Clemens had long before his elder brother and sister been hurriedly and forcibly propelled into the community of the church. After his birth at Würzburg, the Bavarian authorities kept insistently representing to my father that the ceremony was due and overdue,

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so that finally, in order to avoid difficulties, he reluctantly complied with the stringent rules of his native state, and had the babe "sprinkled."

Our christening, August's and mine, is one of my earliest recollections, and it was certainly the most exciting day of our early childhood. Uncle Joseph and aunt Charlotte had an only son, Emile, who was studying forestry at Heidelberg and kept hunting dogs. There had been puppies, and the day of the christening the gardener had for the first time allowed us to see and play with them. August, who always invented and generaled our games, had discovered some flower pots in a remote corner of the garden. We each appropriated one of these, in which we placed a doggie, and the three of us were having a proud and beautiful time marching along the box-bordered garden paths, each carrying a flower pot with a long-eared, soft, spotted pet, when the Carolines—"die alte Caroline," uncle Joseph's cook, and "die kleine Caroline," her niece and our nurse—appeared on the scene to fetch us in and dress us for the christening. We all violently objected to the interruption, but were at last cruelly separated from our pets and borne off amidst screams and tears. August was most vociferous in his protests and kept up his rebellious behavior for the rest of the afternoon. Even after he had en-

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tered the church, clad in his richly embroidered trouserettes and Russian blouse of white piqué, though his curiosity was stimulated into asking what all the objects he saw were for, he kept punctuating his questions, while marching up and down the aisles, with loud howls, "Ich will nicht getauft werden! Ich will nicht getauft werden!" ("I don't want to be christened! I don't want to be christened!")

In the meantime my father, kindly encouraged by uncle Charles Louis and Henry Börnstein, had succeeded in establishing a fairly lucrative beginning of a medical practice in St. Louis. Börnstein had long since become an influence in the growing city in politics and in journalism, as well as in stage affairs. Uncle Charles Louis also had found tiny Highland too confining for his energies and interests, and had joined his old friend in St. Louis, taking immediately an active part in the conduct of the *Anzeiger des Westens*. In the letters of my father during his separation from us, August is constantly referred to as "my clever big boy," my "slender eldest," and often as "my wild" or "my naughty August." Mother and aunt are exhorted not to begin teaching him too early, yet, when the boy was no older than five, his "nice" letters to papa are referred to and his writing favorably com-

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pared with that of children nine and eleven years old. He probably learned while he seemed to be playing, his extraordinary quickness of comprehension and the natural flexibility of his wee hands making easy for him what would have taxed a less gifted child.

CHAPTER II

CHILDHOOD IN ST. LOUIS AND LEBANON

But a fraction of thy wishes, at best, will be granted. Therefore, if thou wouldst possess a tree, desire a forest!—*Bulgarian proverb.*

In August, 1860, my mother, with her three little ones, her sister, and a young female relative of granduncle Joseph, embarked once more for the United States to join her husband—this time on a steamer long considered one of the finest sailing the Atlantic, the *Hammonia*, of the Hamburg line. She was a splendid sailor, but had her hands very full indeed consoling and ministering to the entire party, who all, except the baby Clemens, succumbed to *mal de mer*. “You can imagine,” she writes to her mother on arriving in New York, “how ill August must have been when I tell you that that wild, quicksilver child lay motionless in his berth, scarcely even speaking for forty-eight hours.” Our father met us in New York, and brought his little family in triumph to the little house he had rented and furnished on Tenth street, near Franklin

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avenue, in St. Louis. I remember our exuberance of joy when, as we entered, we found three little rocking-chairs and a low table for our special use. We took our meals at this table for a long time, our elders watching us from the big table in the same room where they were served. August was rarely content to merely eat — he lent spice to the feeding process by eternally new ways of teasing Clem and me, or, when peaceably inclined, invented games of barter and traffic in the eatables to vary the monotony of the scene.

My father's practice had gone on expanding with rapidity, once he had a start. As a matter of course, he marched in the vanguard of progress with the men who advocated a longer and more thorough course of study for practitioners and some kind of check by legislation on the charlatanism rampant then as now. The group of physicians under the leadership of Dr. Adam Hammer, to which he belonged, fought valiantly and self-sacrificingly for their ideals.

In the Humboldt Institute, in which Hammer and his associates sought to realize their ideas and ideals, our father taught obstetrics and physiology until he left St. Louis in 1866. He also served as physician to the County Farm, as the Poor House was then called. He earnestly endeavored to extend his op-

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portunities and to win success — a word which held for him no narrow interpretation of self-seeking and exploitation of his fellow-men.

August was sent to public school when not quite seven years old, but he had been taught many things at home. In fact, a very few days after he had entered school his teacher called on our mother to say that the little boy was so phenomenally quick she hardly knew what to do with him. Primer and first reader he took in a single gulp with a sort of contempt, having long before mastered reading in the more difficult German. He always had so much time and inclination to get himself and the other children into mischief, that the public schools and the maiden ladies in charge of them were soon deemed insufficient to cope with his particular alertness. In various parts of the city there were then German schools conducted by European masters, partly in German and partly in English. They had a more flexible system of instruction, and gave greater attention to the individual pupils than could be had in the crowded public institutions. The school selected for August, which he attended about three years, was kept by a Suabian named Heinrich Werz, who was a very intelligent and earnest master — a born teacher. Clem and I later became pupils at the same school. The three of us, between instruction at the

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Werz school and private instruction from Tantele and good old Schubert, managed to get a thorough grounding in the rudiments. Schubert was the typical German schoolmaster as seen in old prints — small, emaciated, shabby, carrying a stick and wearing round horn-rimmed goggles. He was a kind old man, and fond of teaching us. We were rigidly held to the utmost respect for his authority, and the domestic stimulation and interest in our progress made us wide-awake and easy to teach. Then, too, his instruction was in part remuneration for the devoted medical attendance of my father on his own and his son's numerous and always ailing progeny. He taught us arithmetic and geography, and must have been an efficient master, for August and I, when but ten and nine years of age respectively, were considered ripe for algebra, and at that early age were actually plunged into this abstruse science by the enterprising and ambitious Mr. Werz. Our fellow-pupils were all much older, ranging from thirteen to seventeen years of age, in that heterogeneous upper class of Mr. Werz' hybrid school. Luckily, however, for our future command of English, we left this mongrel institution when August was eleven and a half years old, and for the six years following, with minds and tongues still at the most plastic stage, we came in contact exclu-

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sively with purely American educational and social influences.

More than in school or during lesson hours, August's observant and inquiring mind was probably inspired by what, in those stirring times of the Civil war, was being enacted round about him by a nation agitated to its profoundest depths and divided against itself on a tremendous moral issue. The outward aspect — soldiers marching and drilling, bands playing, artillery moving, the noise and din of the thing — primarily stimulated his imagination, for the war was over when he was but eleven years old. But there was necessarily, in a family so intensely moved by the grand ideas of liberty and justice as was ours, much discussion of the political as well as the military trend of the struggle. Börnstein was for a time lieutenant-governor of the state and took part in the Camp Jackson episodes. Uncle Charles probably had, if the truth were known, an even greater influence on the conduct of affairs in Missouri — publicly through his editorial work on the *Anzeiger des Westens*, but more personally and directly through his closeness to the men at the helm. Bates had been his first choice as Republican candidate for the presidency, but when Lincoln was nominated all his fiery nature went out to this grand and original man, and he marshaled the Germans as best

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he could through the columns of the paper, whose policy he helped dictate, on Lincoln's side. When Missouri was afterward trembling on the verge of defection from the Union, he did valiant, though never recognized, work to keep her on the side of the more generous aspect. At a critical moment he was sent for to go to Washington,—probably by Bates, who had been made attorney-general—to enlighten and convince the president as to the actual condition of affairs in Missouri. To this interview with President Lincoln the unfortunate nomination of Fremont—as it turned out—to the commandership of the Department of the West is to be attributed. Uncle was of the Fremont staff during the hundred days. Whether, as has been held, he was in part responsible for the premature proclamation of emancipation by General Fremont is uncertain, but that his previous experience in European politics, his brilliant and effective journalistic work, his broad outlook, and philosophic conception of history had some weight with his general, admits of no doubt. He foresaw that there was but one end possible to the war—the complete extinction of slavery—and he believed in rapid and trenchant means to this goal. Börnstein, speaking of this epoch in uncle's career says: “He was never content to view things along party lines alone, but had

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a higher, broader, farther-reaching vision. His judgment was clear, well founded, incisive, and nearly all his predictions of that period came true."

So the great events were foreshadowed and discussed in the tiny parlor on Tenth street where we lived, for uncle and my father remained always the most intimate and confidential of friends. August's eager ears doubtless took in what they could, and constructed in a vivid, if childlike, fancy a gigantic background to the stage, where his own wondering, waiting figure stood, a mere speck in the farthest wings. The women were as much concerned as the men. They taught our wee hands to make lint and to roll bandages, and caused our hearts to sympathize with the suffering soldiers and the many widows and orphans. The names of the generals of the forces and the heroes of the battles were always on our lips. Their faces, too, became familiar through albums of photographs that opened like folders. These we youngsters spread on the floor, and spent hours on our stomachs before them, playing at "choosing commanders." Ellsworth, Lyon, and Fremont were first our favorites, and later Sherman, Sheridan, and Grant; but Stonewall Jackson and the great Lee, partial and partisan as we were to the Union side, were scarcely less admired.

Early in the war — I think it was when General

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Lyon entered the town — August's impulse and predilection for a front seat, from which to satisfy his curiosity, gave us a melancholy day. Though his proneness to personal investigation and lust of adventure were no secret, and he was closely watched, he managed this once to escape the vigilance of his mother and aunt. His absence was soon discovered, but for all the long hours of the longest day of my childhood the search for him proved unavailing. A pall hung over the house, and my mother's face grew ever paler and more tragic. Late at night, when her agony was almost unbearable, the coachman came in with the little truant hanging limp and tired — half starved, but unhurt — over his stalwart shoulders. He had found him on the levee entertaining a group of roustabouts, seemingly unafraid, but glad enough, no doubt, deep down in his stout little heart, to be gathered up and returned to the nest.

In 1866, seven years after my father had settled in St. Louis, he felt obliged to abandon his distinctly good chances to acquire a comfortable fortune — at least what in the more modest view of those simple days was regarded as such. His health had been impaired, while a student in London, by blood poisoning in dissecting some virulently septic cadaver. His left arm was, after the infection, in such a state

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that amputation was considered. Surgeons in the late forties of the last century were, however, less keen for such radical measures, and so the arm was preserved, but ever after remained swollen and subject to frequently recurring attacks of erysipelas. He had several of these attacks in the winter of '65 and '66, and this decided him to abandon for a time the strenuous life of a general practitioner in order to find rest and restoration in the country.

In Lebanon, St. Clair County, Illinois, a roomy house, with half a block of garden, was found, and there in April, 1866, our parents, with family increased by the advent in 1861 of sister Lily, entered once more on a quiet, rural life. Long hours of leisure they expected to have for gardening, a pursuit to which both our parents were exceedingly partial. The place was near enough to St. Louis, an hour's ride by rail, to admit of comfortable intercourse and frequent participation in the larger life of friends and relatives in the city. The educational institutions of the small Methodist town stood in good repute. McKendree College for August, who at less than twelve was considered amply ripe and ready for the higher education, offered the classical course my father desired him to take. The younger brood could begin by taking its chances in the public

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schools, which, if the worst came to the worst, Tantele and our parents stood ready to supplement.

In September, 1866, August entered college. All his classmates were years older than he, but my parents were used to the idea of the German gymnasium, which a boy usually enters at ten and where he pursues classical and other studies for eight or nine years. He was not, like most of the brave fellows—some of whom were not only grown, but heavily bearded, and who attended school at McKendree on their own scant earnings—to be hurried through a curtailed course. A preparatory course of two years first and the full four years afterward, with six years of Latin and Greek, was the least that could with equanimity be contemplated by our European-bred progenitors for their gifted first-born.

So it fell out that for six years we were turned loose in the country. This was most lucky for us, for, although the vaunted educational advantages of Lebanon, on closer inspection, proved meager even for that primitive time, we had what was infinitely preferable to the best-equipped schools—all outdoors to teach us and plenty of elbow-room in a nature almost unspotted by the touch of man, pure air to breathe and healthy exercise in it to strengthen our limbs and sharpen our senses, the grown-ups

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not too busy to answer some of the myriad questions we asked, every kind of pet allowed on the premises, gardening as well as collections of beetles and butterflies encouraged by a father who was a splendid botanist and something of an entomologist, eager to impart all he knew to his little troop that ceaselessly clamored for information. The simple life we led was, I am quite sure, the best preparation August could have had for his subsequent career. It left his mind fresh for the real work he later did in Heidelberg, and made his body fit. However tight the parental rein was held, he did not weary his eyes nor bend his shoulders much over books in those years. The musty Latin and Greek authors he instinctively felt were nothing, in all their wisdom, to the pulsating life each season spread out in infinite variety before his delighted senses. He studied enough to pass examinations, which was not alarmingly much, because to him almost every operation of the mind came easily.

August had what the Germans call his "Flegeljahre" in Lebanon — years full of uncouthness and prankishness and impishness. Much was there and then, after all, forbidden because it was considered dangerous, and August's frequent transgressions of the stern decrees got him often into disgrace and kept the female members of the family

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constantly in hot water. My father did not restrain his temper in the bosom of the family as he did when in contact with the suffering. Disobedience on the part of his children to the law he laid down meant a serious visitation. "Spare the rod and spoil the child" was still taken literally in those days. Though our father could be severe, and our mother was habitually nervous and sometimes over-anxious, August, by hook or by crook, managed not to miss much of the pleasures of country life, and he frequently inveigled Clem into sharing the stolen delights. I could always tell when they had slipped off to go swimming in Big Hole, a dangerous pond in the near woods, because they left their shoes and stockings on the landing that led from the dining-room to the basement kitchen, behind the barrels and boxes of supplies that were kept there. I used to shake in my small boots for fear one of them would be drowned, or both of them caught in the act of disobedience, which would precipitate an outburst of "pa's" and a severe punishment on August. At other times they would go hunting with borrowed rifles, or other more or less decrepit shooting-irons they somehow obtained. On one of these occasions — Clem was with him — August did come to grief, badly shooting and mangling two of his fingers. Neither could exactly explain how

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the accident happened. It had no more serious consequences than a little pain and fever, and a few days of anxiety for my mother, with whose nervousness for her gifted, but adventuresome, boy one is inclined to sympathize. That time at least he came perilously close to maiming a hand that was constructed and destined to become a wonderfully willing instrument, the servant of an unusual intellect, in alleviating some of humanity's ills. On another occasion the rash boy was surreptitiously riding bare-back our skittish white horse Billy, who unexpectedly shied and threw August to the ground, badly breaking his ankle. This necessitated an enforced rest and, I imagine, a welcome respite from attendance at classes for a period of six weeks. No limp or perceptible evil result ensued for the sixteen-year-old, but later in Germany he was in the habit of attributing his reluctance to indulge in arduous feats of pedestrianism, such as the German students affect, to a weakness of the injured member.

The accomplishments of swimming, shooting, and riding were thus acquired "by the natural method," without instruction other than that he could obtain by merely watching, imitating, and emulating others, the boy displaying at that early age the dominant traits of his later life — determination, initiative, undaunted courage, and a great

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curiosity of life in its every manifestation, which he indulged at any cost and in the face of opposition and peril from infancy to his dying day.

Outdoor tasks—such as taking the cow to pasture, going after and milking her, feeding the chickens, weeding the garden, gathering the small and large fruits, of which there was great abundance, as well as the vegetables for the daily table—alternated with the permitted pleasures of going berrying, nutting, and persimmoning, and chasing butterflies and beetles. We took all our meals in the pleasant season at a long table in the garden under two immense acacias. Here, too, the family, boys and girls, and man-servant and maid-servant were patriarchally rounded up and pressed into service at stoning cherries, picking strawberries, and paring peaches, apples, and pears for the generous stores of preserves and jellies that were put up. The canning and preserving were done over a fire built in the yard, and all the family took turns at stirring the preserves with a long-handled spatula, standing at considerable range from the boiling kettle.

After the first frost, when dining in the garden was impracticable, we used to pile high the table under the acacias with persimmons culled from a grove near by. The boys had also great hoards of

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hazel, hickory, and black walnuts, that grew wild in profusion in all that district, stored away in one of the outhouses — smoke-house or summer kitchen, or whatever one was given over to their private and manifold uses. There they kept also owls or cat-birds, redbirds, bluejays, mocking-birds — whatever they could lay hands on to house and cage, and make a pet of for awhile. Guinea pigs, white mice, rabbits, squirrels, and a monkey alternated in their affections with the more domestic animals — cats, dogs, and barnyard fowls.

CHAPTER III

INFLUENCES AT LEBANON

Had I read as much as others, I might have been as ignorant.—*Hobbes*.

In order to get into my pen picture a shading of a man's view of the character of my brother in early youth, I asked one of his classmates and comrades of those days, Mr. W. A. Kelsoe, whose faithful memory is a byword in St. Louis journalism, to supplement my story by a letter reminiscent of their mutual relations and the life and spirit of the little Methodist College. Mr. Kelsoe's letter follows in part:

Your brother and I entered the preparatory department of McKendree College the same week, if not the same day, in September, 1866, and graduated together in June, 1872. I boarded for five years within a stone's throw of his home, and met him almost daily in the class-room, on the college grounds, and in the streets of Lebanon. For a year and more he was, I think, the youngest and smallest of the students, but was even then regarded by his associates and teachers as one of the brightest boys in the preparatory department. He attracted a great deal of attention by his inquisi-

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tiveness, and was always asking questions, seeking more knowledge, never satisfied with what he obtained. He did not seem to care for high marks or a good record in his recitations, but his classmates knew that young Bernays was really better informed than they on most of the subjects studied. This was particularly true of the Greek and Latin languages, and of chemistry, botany, zoölogy, physiology, and physics.

August seldom missed a recitation, except during a few weeks in the fall of 1870, when he was laid up with a broken leg. He spent considerable time in the college gymnasium, and took part in some of the public exhibitions given there. He was fond of outdoor sports, and joined the first base ball club organized at McKendree College. When Bernays received the degree of Bachelor of Arts on June 13, 1872, he lacked four months of being eighteen years old. He was the youngest member of his class and one of the youngest graduates in the history of McKendree College.

August was accommodating even to the extent of sacrificing his own comfort in aiding others. He had a big heart as well as a big head. He was never quarrelsome; in fact, I don't remember ever having seen him in a bad humor. He was an optimist, looked on the bright side of things, had a smile and a kind word for every one. He liked fun, and occasionally engaged in college pranks, but I never knew him to willfully injure a fellow-student or to treat him unfairly in any way.

Mr. Kelsoe's account of August is, of course, colored by his own kindness and gentleness, and it is possible that he has forgotten the naughtiness and impishness of August's boyhood; but certainly no student's forbidden frolic or demonstrative insubor-

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dination to the laws took place at McKendree, while August was enrolled there, without his being assigned a lively part in it. To be sure, he was under paternal vigilance, and not often permitted to go out at night. He may not, therefore, have had an actual part in the flying of the physiology class skeleton from the flag-pole on the campus, or in painting Professor Blair's pony sky-blue, but that he helped originate these and other more or less reprehensible schemes to stir up the staid and stolid little old town goes without saying.

On one occasion I was present when a professor, unpopular because he was supposed to have insisted on the expulsion of a beloved leader of the students, was delivering a lecture, which the students as well as the townspeople attended. August had carefully prepared a huge bouquet of mullein leaves and other unsavory weeds, and this, at a striking moment of the lecture, he threw upon the platform to mark his disapproval of anything that professor stood for. President A. was sitting on the platform and had his eyes on the boy, whose mischievous and rebellious propensities he knew. He called August by name, and made him march up to the platform and remove the token of animosity. Our parents were in the audience, and I feared August

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was in for a heavy penance at home, which is probably the reason the incident remains so vividly impressed on my mind.

August had to be more or less gently urged in his studies of Latin and Greek. Learning declensions and conjugations in languages no longer alive in the mouths of men was to him not an unmixed joy. But my father was inexorable. He held that the strait and narrow door of the classics had to be passed, because, in the first place, this kind of study ranked high in his estimation as a mental discipline, and, further, because it seemed to him to be the key to pleasures of the intellect that a boy's limited vision might fail to foresee, but to which in later life he would turn with the utmost delight. So he coached and coerced and insisted, and succeeded in making his son acquire a thorough grounding in the classics, but that abiding love that in after-life was to cause him to revert to them for solace or diversion was not instilled. Sometimes cousin Emile Joseph — the typical pastor's son, whose studies of forestry had come to naught, and who eked out a scant living as an engraver in St. Louis — came over and spent with us the weeks and months he was out of a "job." By way of making him a bit useful, the rehearsing of August's lessons in Latin and Greek was deputed to him. He was a flabby, good-

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natured individual, fond of children, and at the age of twenty-six still had a pretty good recollection of the classical lore which the German gymnasium so effectually imparts to its pupils.

From Horace and Homer the rest of us were shut out, but not from what we considered Emile's finest accomplishment and chief purpose in life — telling long and blood-curdling stories of adventure, tales he either invented or had heard or read. He was a wonder on the exploits of famous brigands, bandits, pirates, and other outlaws. His tales were mostly wildest fabrication and romancing, but they were wittily and prancingly told in good German. In summer on the lawn, under the fruit trees, or in the vine-clad bowers and arbors that dotted our big place, and in winter by the fire, while we cracked and ate nuts, and made the flames flare up by feeding them with the shells, August's eyes grew as big as the proverbial saucers and flashed with excitement as Emile's tales became in the course of an evening ever more lurid, and as he called out of the vasty deep of his fantastic mind, to astonish and frighten us, ever more frightful deeds of the worthies to whom he introduced us with such immediacy and vim.

Later August became equally fond of a different kind of tales, also brightly colored, but based on

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the history of recent times. These he got from uncle Bernard, our father's eldest brother, who came over from Highland on frequent visits. This uncle was very badly crippled, having been dropped when a baby by his nurse, and so seriously injured that one leg was a great deal shorter than the other. In spite of this infirmity he had been a rabid revolutionist in '48, acting as treasurer of the funds of the liberty-mad young men of the Palatinate. After '48 he at first took refuge in the Netherlands, and, when his brother Jacob and his family were ready to emigrate, joined them and came to America. In Highland he bought a small house with a garden, which, in spite of crutches, he managed to cultivate with as exotic and riotous a growth of plants and flowers as he could beg, borrow, or crib. There he lived nearly forty years. At first he tried to read American law to supplement his German studies, and opened a little office as attorney and notary public. He never did much, however, in this calling, but by dint of a small inheritance and a little journalistic work, mostly for the *Milwaukee Freidenker* — in violent, atheistic vein — managed, with some help from my father, to lead a secluded rural life. Through reproductions of the art works in illustrated magazines he satisfied in a queer, stunted way his great love of art, and in his

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own estimation figured as quite a collector. On his flight to Holland, stopping for a time in the low Rhine country, he had picked up for a song a few really valuable Flemish paintings, and these, together with a great deal of rubbish, ornamented his walls. But his ceaseless smoking so blackened them that the colors at the time of his death were scarcely distinguishable. There were besides these paintings — which, when cleaned up, proved to be rarely fine examples of the best time of Flemish art (they are at present in the keeping of the St. Louis Museum of Fine Arts) — boxes upon boxes of every kind of black-and-white from wood cut to metal engraving. Scarcely any of them had value, excepting for the collector himself, who, with his superabundance of fancy and leisure, may have reconstructed from those poor outlines something of the charm and color of the original. This mass of heterogeneous stuff, dignified by the name of art collection, he left to August, in whom he always found what he grew to value most — a patient and interested listener to his tales of that spurt for liberty in '48 that ever formed the burden of his talk. The great event of his life it had been — the one actual taste and touch he had had with the wider concerns, the grander movements of the world.

Excluded as he was from the feast of life by his

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infirmity, uncle Bernard sought to make up for what he missed by the pleasures of the imagination. His language was most picturesque, and whatever he saw, heard, or read never suffered in his versions from understatement. His account of the events of '48 and of his share in the little rebellion of the Palatinate took on, as the years elapsed, more and ever more pronounced colors and bolder contours. August never betrayed the slightest astonishment at, or expressed the remotest objection to, the changes uncle Bernard's narrative underwent. On the contrary, he led him on by adroit question and opportune relish to increasingly vivid and hazardous arrangements of the scenes. The personages that strutted over the small stage of that long ago would never have recognized themselves in their increased stature and importance. But the listener gloried in the artistry of these embellishments, and was one with the artist in the enjoyment he derived from the highly-wrought work.

In politics uncle Bernard never forgot and never forgave. The achievements of the Germans under Bismarck and Kaiser Wilhelm I. he pretended to despise. The first emperor of Germany, so idolized abroad, remained to him the "Kartätschenprinz," and Bismarck the hateful reactionary and foe to liberty. Nothing short of a German repub-

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lic, exactly as planned by himself and the forty-eighters, would have satisfied him. His tirades against monarchy were wonders of invective. He was as fluent, as bitter, as inventive in epithet, as forcible in denunciation, as the ancient Jewish prophets.

A more potent — because a broader, saner intellectual — background than Emile's and uncle Bernard's, against which August learned to range the events of his own little world, was furnished by uncle Charles, who came very often from St. Louis, delighted to share with his brother and his brother's family the larger interests of which he was a part. Under Lincoln he had had two brief consulships — the first in Zürich, the second in Helsingör, Denmark. Returning in 1864 to the United States, he resumed his journalistic work on the *Anzeiger des Westens*, which had meanwhile passed into the hands of Carl Dänzer, and later he became for a time an editorial writer on the *Republican*.

In the remarkable and quietly influential group of men and women who at that time began coming together regularly in the St. Louis Art Society, who founded the first musical associations, reformed the schools, introduced the kindergartens, the benefits of whose insights and energies we of the St. Louis of 1912, but not we alone, are still reaping. uncle

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Charles was one of the most interested and interesting of members. William T. Harris was the leader of this coterie, and with Thomas Davidson, Denton J. Snider, Governor Brockmeyer, Horace Morgan, the Yeatman-Allen family, the Blows, the Chauvenets, Miss Brackett, Miss Beedy, and others formed the nucleus of a circle, the eddies of which spread gradually all over the United States. The comprehension of educational needs, the philosophic culture, the universality of interests that distinguished this little center in the Middle West was second only to that of the group of transcendentalists under Emerson, Alcott, and others who were working a little earlier along similar lines in the East. In the practical results obtained by them, our St. Louis men and women have been indeed superior, though the poetic appeal and the greater literary creativeness of the older group, together with some weird experiments of living, by which they tried to translate their theories into actualities, made the latter more widely cited.

The study of pedagogics and of metaphysics led to the publication of the *Journal of Speculative Philosophy*, the first and for a long time the only publication of the kind in the United States. To this uncle Charles contributed papers on art and music, and he was, if I mistake not, the first in St.

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Louis to create an interest in Schopenhauer, whose light was then just dawning on the European horizon. He translated parts of the "World as Will and Idea," of the "Ethics," and of other writings of the great pessimist, as well as some of Auguste Comte's positivist preachings. He joined in the discussions on Fichte and Schelling, and made a special study of Hegel, who was, of course, the chosen apostle of this school, though the erudites like T. Davidson suffered no eclipsing of the ancients, Aristotle and Plato.

At many a week-end in Lebanon we listened to a rehearsal of the debates that had taken place in St. Louis on subjects of a metaphysical order, and were made acquainted with the practical innovations Harris and his associates were planning and carrying out.

The most exciting events, intellectually, of the sixties and early seventies were, however, the scientific findings of Wallace, Darwin, Huxley, and others, destined to revolutionize every branch of science and to color all the mental experiences of the generation then growing up. The vivid spark of the new theory flew instantly to the most inflammable spot of August's mind. Our father, always on the qui vive for the really progressive discoveries and the productive thoughts, early procured the

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"Origin of Species," "Natural Selection," and the entire works as they appeared of that wonderful group of scientific men. He read and studied them with August, making them truly alive by illustrating them with the profusion of plant and animal life at his elbow. Thus it occurred that August chose for the theme of his graduating oration "The Darwinian Theory," a subject which lay quite apart from the teachings received in the little orthodox Methodist College of McKendree. The faculty, it was said, had a special meeting, and a stormy one, in order to decide whether permission could be given the youth to speak on so dangerous a topic. In the little arch-churchy town it seemed — aside from the boldness, the heterodoxy, the departure from tradition — a reflection on the instructors that, after six years spent in study under their guidance, this disciple, whom they had caught so young, should wander far afield in the choice of his subject from the matters chiefly and so importantly taught — should stray indeed into the very paths of the sort of scientific speculation discouraged by the spirit of the school. In spite of the conservatism current at McKendree then, there must have been in its faculty — indeed there were — men of minds more open to advanced thought, and what objection existed was in the end withdrawn, and August was allowed,

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after duly submitting his thesis to the authorities, to speak on the then fresh and much-combated theory of the origin of man. August always believed that Professor Deneen, the father of the present governor of Illinois, a man of strong, though reserved, personality, had stood his friend and advocate in this finale to his college life. Professor Deneen taught Latin at McKendree, and because of his sympathy with the modern, broader views enjoyed the confidence of the students in a special manner. No doubt he comprehended that the bent of August's mind instinctively turned away from the authoritative doctrinal aspect of things.

It was not indeed possible, under a scheme of study so diametrically opposed to what could bring out the particular gifts, the genius, he showed immediately afterward at Heidelberg, that August should have distinguished himself at McKendree. He intuitively abhorred methods which rested on the development of the faculty of memory alone.

Toward the close of August's last semester at McKendree our eyes and longing began to turn eastward. In more than one sense the sun was rising in those early years of the seventies over Germany, and August's luck was once more with him, inasmuch as he touched the soil of the land of his ancestors just as the sap of a new spring swelled all

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its powerful veins with a vigor and a confidence that had not been felt since the Thirty Years' war by the so long unfortunately disrupted and despot-ridden nation. The elation all Germany felt at her great victory of '70-'71 and her union in one great empire — though I hardly understood its meaning at the time — was foreshadowed to me in the ecstatic look of my mother's face when the news of the surrender at Sedan reached Lebanon. The mysterious light in her hazel eyes made her face like that of a beautiful Madonna that September night at Lebanon when she called us into the house and, with profound emotion in her lovely low voice, told us that the war was at an end and Germany victorious. Then, taking Lily and me by the hand, making the boys precede us, with our father she walked with us all the way through the town, stopping — as was not at all her wont, for she was a shy and reserved woman — to talk to every one we met about the triumph of Germany.

We were extraordinarily well prepared to enter German schools through the home training we had had in the language, which had been frequently supplemented by private lessons from German schoolmasters — immigrants stranded for a time in Lebanon. A man named Löhniger had especially fortified us in grammar, particularly syntax, by making

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us do most difficult tasks in intricate and involved German sentences. Emile Joseph, as well as some of these German instructors, had also given us lessons in drawing, by which August profited most. Tantele and my father taught us French.

CHAPTER IV

HEIDELBERG DAYS

Dein Leben gestalte sich wie ein Gedicht
Von der grossen Versöhnung des Glücks mit der Pflicht.
— *Ibsen.*

“A man’s profession and his sweetheart,” Professor Michael Bernays once said to me, “should fall to his lot without search or effort on his part — gifts of the gods.” Such was the case with respect to August and his profession. Never, as with most boys when the critical age arrives, were there discussions, family councils, or consultations with instructors about what he was fit for. Life — its growth, its decay, everything connected with it — had always preëminently interested him. Whenever there was an accident in the vicinity he drew close to the scene, watching what happened from as good a point of vantage as he could secure. Wherever men spoke of health and disease, of epidemics, of remedies, or of operations, he stood by, a small figure with big eyes, fairly drinking in what was said.

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It had long been decided that as soon as August should have completed his course at McKendree the whole family was to be taken to some German university town. My father wished to personally superintend his son's medical studies. So in July, 1872, our party — father, mother, Tantele, we four children, accompanied by W. A. Kelsoe and Robert Lüdeking, of St. Louis — embarked together on a steamer sailing from Baltimore. Kelsoe's intention was to prepare himself for journalism by the acquisition of languages and through travel; Lüdeking's, to study medicine. Heidelberg having been chosen as our destination, thither our parents at once repaired to rent and furnish an apartment. August and I were sent to Frankenthal to visit at the house of my father's brother-in-law. Uncle F. was a recent widower, with a family consisting of a son a little older than August, a daughter just my age, and a younger girl about Lily's age. We found the cousins very agreeable, and the friendship then formed remained cordial and warm. Max, the son, had been for several semesters a student of law at Würzburg. He belonged to a corps, proudly exhibited a recent scar or two he had acquired dueling, and immediately ingratiated himself with us by his wit and gayety. He was, like his father, an excellent raconteur — in fact, the whole family was

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distinguished by a lively sense of humor. August entered into the life of these relatives with his usual spirit, especially draining Max dry by his questions about student life.

September found us all once more together in Heidelberg. As the University did not open its doors until the middle of October, August, Kelsoe, and Lüdeking had time to tramp all over the surrounding country, take all the famous walks to the Schloss, the Molkenkur, the Speierer Hof, and to go by rail to the towns of interest that cluster thick in that historic region — Speier, Worms, Schwetzingen, Karlsruhe, Darmstadt, Frankfort on the Main, and other places.

When August and Lüdeking finally went up on the longed-for day the Ruperto-Carolina opened her doors, the two youths — both small, slight, and beardless — were rather contemptuously looked over by the attending official. "You have not been confirmed, have you?" he addressed them with galling superciliousness. Confirmation is a rite to which the utmost importance is attached in Germany, and which is rarely omitted, even by families who cultivate religion but slackly. This ceremony over, a boy is admitted to some of the privileges of man's estate, notably that of being no longer addressable indiscriminately by the familiar "Du." Confirma-

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tion had not, of course, been on the program of our father, nor yet on that of the elder Lüdeking. The two youths, taking the speech literally, stood irresolute until the secretary tauntingly continued, "Well, are you over fourteen years of age?"—so immature was their appearance. August was just eighteen and Lüdeking about nineteen. On their announcing their age and that they were "confessionslos" (without creed), they were allowed to matriculate. With zest and ambition they began their career.

It was an amazing spectacle to see August, after a day spent at lectures and at dissecting, pore at night over his thick volumes on anatomy, physiology, and osteology—the wild, unruly youth, always full of mischief, and at McKendree so frequently in disgrace for inattention and failure to obtain good marks, seemed to have changed his nature. At Heidelberg the relation between books and life came to be revealed. He found no waste places in the work laid out for him there, and needed no spur but that of his innate craving for knowledge. It was, however, in the second year of his university life that he came in contact with the subjects which stirred his interest into a passion and encountered the men who fanned the flame into a glow of life-long duration. Biology and comparative anatomy,

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and the work he did under Professor Gegenbaur and his assistant, Dr. Max Fürbringer, called out the fullness of his enthusiasm and urged him to a display of his utmost energy.

He worked with a joy that was a joy to see, and to no evanescent purpose, as Geheimrat Fürbringer sets forth in the chapter he kindly contributes to this book at my request. In letters to me written after my brother's death, Professor Fürbringer says: "Your brother, by his scientific researches as well as by his beneficent work for his fellow-men as a surgeon, reared for himself a monument more lasting than bronze." And again: "Gegenbaur had a great influence over him. Before that great sun my tiny taper pales. But, after all, it was the potentiality your brother carried within himself that mattered. It was because he had a mind akin to Gegenbaur's that there could be that resonance of what through his senses penetrated from the outside. In such natures the roots of their power lie within themselves." Gegenbaur undoubtedly recognized this equipment, congenial to his own, and greatly encouraged the youth who burned to clear up some of the mystery that surrounds the growth and development of our physical organization. He was genuinely regretful when August, on the advice of our father, turned his attention from this first love

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of his to surgery. August himself was at the time most loath to leave the morphological work he so loved, and during all his subsequent life sighed occasionally as he cast longing, retrospective glances at that first golden harvest reaped in the pursuit of pure science. Even in the face of the conspicuous success that came to be his in surgery, and the immense amount of direct and visible relief he was able to bring to the suffering, he sometimes half regretted that he had allowed himself to be drawn away from the more tranquil delights of scientific research. He must have comprehended, too, that the surgeon resembles the actor in that much of his time is necessarily given to the mere use and interpretation of what others have found. True, he may invent a method that will outlast a decade or two — show himself resourceful, inspired, when face to face with the unexpected that lurks everywhere — but much of his inborn and of his acquired skill dies with him. As the plaudits of the multitude acclaiming an actor are hushed soon after his death, so, too, the blessings of those the surgeon has cured of disease and wrested from death are ephemeral. But the names of those who discover the laws that govern the life of our planet, and thereby increase the possibilities of foreseeing the consequences of natural events and human actions, go thundering down the ages like an

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avalanche that gathers strength and sound as it rolls. The Newtons, the Harveys, the Darwins, the Gegenbours, the Helmholtzes are fixed stars, while the greatest surgeons have but the career of meteors that flare up and soon fall extinguished.

It is not to be supposed, however, that during those strenuous years of preparation there was no play. August never could suppress his vivid, fun-loving temperament. He became a member of a little "Verbindung" called Corona Carola-Rupertensis, which Lüdeking, Kelsoe, and a second cousin of ours — a student of law, Carl Flesch, now alderman of the city of Frankfort and member of the Prussian diet — also joined. There he took part in all the jolly nonsense that is traditional in these students' societies. He learned to drink beer, though his stomach always rebelled against the quantities habitually imbibed by the Germans. He suffered his first and a few subsequent "Katers," made and listened to "Bierreden," and joined in the beautiful student songs.

There was the Neckar to swim in and row upon, and there were excursions into the country, which served the double purpose of an outing and foraging for salamanders, tadpoles, and other animals that had to give up their lives in the interests of morphology. Lebanon experiences and the observations

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made there as to the habits of animals of that kind and their haunts served him well here. He was always full of regret that he could not lay hands on the wealth of material that lived and died in the Mississippi Valley without ever a chance of being studied for the ultimate weal of their more sentient and highly developed brethren, the humans. Reflecting on the inaccessibility of these wriggling reptiles that abounded in his American home, once caused him to commit a high-handed robbery, which I fancy he executed with mingled feelings of amusement, exultation, and contrition. Cousin Max recently recalled the story to my mind. "Do you remember," he says in his letter, "the affair of the alligator uncle Charles brought over from America and gave to August in 1874? August bestowed it on me for my aquarium. Then, when he had become so devoted to the study of comparative anatomy, he regretted the gift. At any rate, he came over to Frankenthal one Sunday and spent a pleasant afternoon with us. After he had departed in the evening the little alligator could not be found. It was not until some time afterward that the mystery of its disappearance was cleared up, and I learned by accident that it had been offered up on the altar of science in the Gegenbaur laboratory. No doubt August felt that to me it was only a toy

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of which I would soon tire, and that the animal itself must be homesick and unhappy in an uncongenial atmosphere and climate. So, that to let it perish for an exalted purpose — quite, as it were, in the odor of sanctity — was really acting according to the higher morality.”

An incident that illustrates his strong emotional nature occurred about the same time. Several American families were then living in Heidelberg who had been of my father's clientèle in St. Louis, and these consulted their old physician in cases of illness. In the last stages of her fatal illness the little daughter of one of these families was his patient. He had diagnosed tubercles of the brain, a diagnosis concurred in by Professor Friedreich, whom my father called in consultation, and ultimately verified by the autopsy. August frequently accompanied his father on visits to the little unfortunate, who was of course foredoomed to speedy dissolution. Whether August had conceived more than an ordinary fondness for the child, or whether, in his exuberant optimism, he hoped they could save her, I do not know. Perhaps he then for the first time realized in a flash how, once launched in his profession, he would be baffled and vanquished, again and again, by death in spite of all exertions. He came in at dusk one day to take his afternoon

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coffee that was always kept warm for him in the oven of the big porcelain stove in the sitting-room, and my mother gently imparted to him the news of the child's death. I seem to see him now — slowly push aside the cherished stimulant, his eyes filling with tears, lay his head, with the wavy black hair, on his folded arms on the table, and give way to a storm of passionate grief.

In the third and fourth years clinical work was, of course, the main issue. Luck remained August's auxiliary in giving him in surgery a teacher as brilliant and as inspiring as Gegenbaur was in comparative anatomy. Soon he was as keenly interested in surgery as in his earlier studies, which he never gave up, but, busy as he was, managed to carry on alongside of clinical work.

Professor Gustav Simon, second in originality and attainment to none of his contemporaries in surgery, was not slow to recognize the ability of the young American who followed him about with such whole-souled attention. When he found that nimble fingers were the concomitants of the exceeding speed and accuracy of his mental processes, he began to extend special privileges to August. Long before August went up for his degree he was frequently asked to assist at private operations of Professor Simon. As he had sought and won the friendship

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of Gegenbaur's first assistant, so he also gained the good-will of Simon's, Dr. Braun, with whom, in and outside the clinic, he associated pleasantly.

With passionate sorrow he stood at the death-bed of his teacher when, in 1876, Simon succumbed to aneurysm of the heart. It was the same fatal illness of which he himself was to die thirty-one years later — even younger than Simon. With the singular fidelity and gratitude that were marked spiritual attributes of his, he mourned Simon, and never, on fitting occasion, during his entire life did he fail to voice his admiration and his thankfulness to the great teacher who had guided his initial steps in surgery. Simon's place at Heidelberg fell for a brief space to Hermann Lossen until Czerny, a man the peer of Simon, could be obtained as his permanent successor. It was Lossen who, in the summer of 1876, just after August had taken his degree, appointed him to take charge of the surgical section of the Heidelberg hospital, substituting for an absent assistant.

At the end of his eighth semester, in July, 1876, August took his degree, *summa cum laude*. After such signally successful work, and in view of the general consensus of opinion on his special aptitudes, this was to be expected. Yet it was the first time

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that highest honors were conferred upon an American at Heidelberg.

Our mother did not live to share my father's joy in seeing their son win this distinction. She had died in December, 1874, three weeks after giving birth to our brother Walter. Her death threw a piteous pall over the home, and for a time we were like a ship that had lost its rudder. My father seemed as if stunned by the blow, and all the long winter and spring which followed he spent almost all his time in a tiny room, to which he had withdrawn, poring over books. Previous to her death the social life of the home had been most agreeable, and we entertained many visitors. The family connections on both sides had been resumed with alacrity, and our house during the spring and summer fairly swarmed with uncles and aunts and merry young cousins from the Rhine and Taunus country, where our parents' relatives still lived. Our mother was a good housekeeper and most hospitable, glad to show her good uncles — Joseph of Ladenburg, and Fritz and Carl Bertrand from the Taunus — that she had not forgotten the many kindnesses received at their hands in youth, proud of her little brood, and anxious to make her children acquainted with their European relatives. My father's people were

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equally welcome. The accessibility and the beauty of Heidelberg made it a point not to be neglected. Various of the young men, Fleschs and Creizenachs from Frankfort, as well as our cousin Max from Frankenthal, pursued their medical and legal studies at Heidelberg for some semesters, and often dropped in or were asked for Sunday dinner, to the rapid furtherance of our acquaintance with German sentiments and ideas and of our conversational agility in the language.

Many Americans came over in 1873 to visit the Vienna exposition. Professor Thomas Davidson, the great scholar, was our guest for a time. He came accompanied by Arthur Little and the gifted Arthur Amson, who had been a schoolmate of ours at Werz' in St. Louis when we were little children. A photograph of a group consisting of Davidson and his two pupils, together with Kelsoe, Lüdeking, and August, at cards and beer, was taken that summer, and has been several times reproduced in St. Louis papers. Friedrich Hecker, whom our parents had known in St. Clair County; Madison, one of the St. Louis street railway magnates of the time; Madame Strothotte, and last, but not least, uncle Charles and aunt Pepi, were with us for short or long visits, as the case might be, during the summers of 1873 and 1874. Uncle was taking a year's

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vacation, which, however, did not mean entire freedom from work. He wrote a series of brilliant travel letters for the *Anzeiger* during this absence from St. Louis. But he was suffering from angina pectoris, and, after spending the winter of 1874-'75 in Italy, returned at the end of March to Heidelberg a very sick man. There were complications of his trouble. My father called in Friedreich and other high authorities, who puzzled over the case, and I believe finally called it neurasthenia. August was much in attendance in uncle's sick-room, and, if he did not profit much in the science of diagnosis as revealed by the physicians there, he certainly heard many a wise counsel from the lips of the sick philosopher, which he may or may not have taken to heart. In the subsequent unfolding of his life the faculty of synthesizing, which my uncle possessed, and the gift of foreseeing the distant consequences of action, commended itself to the nephew, and was used in conjunction with the training in analysis, emphasized by the sciences to which his Heidelberg studies had been devoted. The combination, in just proportion of the inductive and deductive methods of reasoning, was certainly what later made his diagnoses so astonishing. Almost from the moment of beginning his practice "in difficult obscure diagnoses," I have been told, "he often, on seemingly

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slight premises, contradicted others who had made thorough examinations, and was found right frequently enough to make his gift seem uncanny and give a sort of credence to the saying that he had second sight."

This brings me to speak of one of my brother's most conspicuous attributes, sometimes numbered among his glaring faults — his gorgeous and exuberant imagination, which led him in the ordinary affairs of life to often overstate the case. Undoubtedly he inherited from some Semitic ancestor — though our father had it not — this mental trait of seeing at times, in all the splendor of Oriental design and color, and in gigantic proportions, that which to the jejune and matter-of-fact appeared as gray, quotidian, and of ordinary dimensions. "He would discourse and describe, and sometimes paint the most vivid and startling pictures; but they were what his mind saw — sober facts to him," says one of his intimates. Nothing to me seems more obvious than that it was this very power of the imagination, controlled and tempered by his severe training in scientific fact-gathering and analysis, but never wholly suppressed, which gave him what appeared as preternatural superiority in reading the truth in obscure cases. His knowledge of normal human anatomy was the firm basis of his judgments, into which

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imagination did not enter, but morphology had taught him something of the fanciful workings of nature as she evolves one form from another. Rudimentary organs, remnants, and vestiges from a previous stage of development were familiar to him from his embryological work, and he knew that here disease often sets in with its benignant and malignant growths, and causes strange disturbances in the human equilibrium. At such points his imagination acted not only as a striking and picturesque factor of his mentality, but as a useful and essential one. Applied without the curb of long practical research and severe tests of truths in affairs not medical, abetted, besides, by the American delight in superlatives and overstatements, his estimates and his narratives were indeed often a hit or a miss, a careless guess or gamble, or a delicious flight of pure fancy which he expected no one to take seriously. Dry and literal people judged this idiosyncrasy or gift with severity, and accused him of gross habitual exaggeration. His enemies — of which he came in after years to have a considerable number — flatly called it lying. But as he often acted in most important affairs, notably in his financial transactions, upon what he averred, it is clear to those who knew him best that the convolutions of his brain were not constituted like those of the plain, sober citizen who

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follows his nose, or that the life principle that coursed through them was of a particular quality. He took obstacles and overleaped objections, and acted on intuition, seeing frequently as likely as within his grasp what to others appeared but as a dim and altogether negligible potentiality.

CHAPTER V

AN INTERLUDE BY PROFESSOR FÜRBRINGER

My acquaintance with Augustus Bernays began in the spring of 1874, when I entered upon my duties as prosector of the Anatomical Institute of Heidelberg, of which Carl Gegenbaur, on the retirement of Friedrich Arnold, had become the director. Augustus Bernays, then twenty years old, the son of Dr. George J. Bernays, had been studying at Heidelberg since the winter of 1872-'73, the pupil in anatomy first of Friedrich Arnold and then of C. Gegenbaur. His father was a member of the distinguished Bernays family, represented at that time in the universities of Germany by Jacob Bernays, the erudite professor of philology and head librarian at the university of Bonn, and by Professor Michael Bernays, the celebrated lecturer on the history of literature at Leipzig and Munich, far-famed also as a student of Goethe and Shakespeare.

Heidelberg University had at that time a deservedly great reputation in science. Among its teachers of medicine and natural science it then numbered

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Friedrich Arnold in anatomy, Nicolaus Friedreich for the clinical study of medicine, Gustav Simon in surgery, Otto Becker in ophthalmology, Robert Bunsen in chemistry, and Gustav Kirchhoff in physics. This famous galaxy of names, together with agreeable reminiscences of his student life, probably induced Dr. George Bernays to select Heidelberg as the institution best suited to provide his son with the culture and proficiency in his profession he coveted for him.

August's initial studies received special guidance through the lectures of the famous Friedrich Arnold — lectures of supreme polish, both as to form and content — as well as by that master's personal, most devoted attention to the work in the dissecting room. Arnold repeatedly testified to the exceptional application and splendid success of young Bernays in the exercises he conducted. But to Carl Gegenbaur, who took over the chair of anatomy at Heidelberg in 1873, the decisive and directive element in the career of the young student must be attributed. This man of genius, this pioneer of modern scientific investigation, came to Heidelberg in the fullness of his intellectual power. As a reformer of the science of anatomy, as a comparative — i. e., as a thinking — anatomist he appeared, and whoever was fortunate enough to get into close touch with his marvel-

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ous mind, with his forceful and magnetic personality, remained bound as if by a spell. Augustus Bernays became his enthusiastic pupil. He did not neglect his other studies in natural sciences, physiology and histology — Kühne more than once commended his zeal in attending his lectures and courses — still, the main current of his thought was directed toward anatomy. From the winter semester of 1873-'74 to the spring of 1876 he heard Gegenbaur's lectures on human anatomy, embryology, and comparative anatomy, and worked as an advanced student in the anatomical laboratory. Even after he had attended the clinics of Berlin and Vienna he devoted every hour that was his own to research work in anatomy with Gegenbaur. All the summer vacation and what spare hours he could muster in the fall of 1877, after he had left Vienna and before he went to London, were pressed into service in order to complete the second of his anatomical investigations. The first had been his dissertation for the "Doctor medicinæ heidelbergensis," acquired with such signal distinction in July, 1876.

It was not long before I grew fond of young Bernays, meeting him, as I did, immediately on my arrival and seeing him daily thereafter. Unlike the present time, with its quickened and feverish activities, when almost everybody lacks the leisure to col-

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lect his thoughts and become really acquainted with his neighbor, the Heidelberg Anatomical Institute in the seventies of the last century was a flourishing little oasis of friendships and cordial intercourse. In its scantily furnished apartments there then worked, besides Bernays, in productive analyses and research, E. Rosenberg, prosector of the University of Dorpat, M. Helm, Lorent, J. Palmén, J. Brock, W. Leclé, M. von Davidoff, and others. I was first assistant and prosector, and E. Calberla and G. Ruge were respectively second and third assistants.

What a happy time we had! What enthusiasm inspired us for our great teacher, Gegenbaur, and for the work laid out for us! What youthful ardor! What sprightliness! What mutual attachment and what a continuous exchange of the results we achieved and the thoughts thereby engendered! It was the springtime of my life, and there was the same burgeoning of ideas in the minds of all the little band. Helm, Brock, Calberla, and Lorent died young. Rosenberg became professor of anatomy at Dorpat and afterward at Utrecht; Palmén, professor of zoölogy at Helsingfors; Leclé, professor of zoölogy at Stockholm; Davidoff, director of the zoölogical laboratory at Villefranche sur Mer; Ruge, professor of anatomy first at Amsterdam and afterward at Zürich.

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Augustus Bernays was one of the brightest and most cheerful of all this throng, and at the same time perhaps the most eager and diligent at his work. He stands before my memory as in life — in stature below middle size, with large, black, flashing eyes, his face aglow with enthusiasm, his youthful gestures and movements quick as thought, for fear of wasting a minute of the time allotted to his beloved work. I recall also his splendid zeal in going out to forage for and collect the material for our research work, as well as his indefatigability in using the microscope. And what a merry comrade he was, always frank and ready to help others, bubbling over with life, with humor, with all the charming traits that belong only to really good, pure, and unselfish natures. He was like a brother to us all, and Gegenbaur, too, was especially fond of him. The best proofs of the professor's affection were the long scientific talks they used to have, based on Bernays' researches. It was evidently a joy to Gegenbaur to draw out this highly gifted, ceaselessly active pupil, and to help mature his thought, which even at that early period was thoroughly original. During the first year of my acquaintance with Augustus I met also his father and his younger sister, Thekla, and was repeatedly a guest at their hospitable home.

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"After work well done, rest is sweet." With us this proverb read, "After work well done, enjoyment of life is sweet." We could all assert without conceit that we had not wasted our time, so that our leisure was well deserved. The great diversity of previous experience and the variety in the cultural development of the workers in our laboratory, springing, as they did, from the most distant countries, naturally led to a vivacious and highly differentiated exchange of ideas. Much scientific and artistic stimulation could be obtained in the university town as well as in the neighboring city of Mannheim. The marvelous environs of Heidelberg — the Odenwald, the Black Forest, the vine-covered hills of the Palatinate — sent out their lure. Especially on days when the laboratory had to be given over to the scrubbing rage of the servants did we go off on excursions into these beautiful regions. In these outings sometimes the Bernays family participated. How lovely the world seemed! How bright the sun shone on all that glorious region, resplendent with the golden green of the early leafage, the bountiful blossoming of the spring!

In Neuenheim, just across the Neckar, the well-known musician and composer, George Vierling, a rugged, whimsical, most original old fellow, a true child of the Palatinate, spent his summers. He was

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not a genius, but a very learned composer, a man of broad and thorough culture that did not stop at music. Because of his services in unearthing some of Bach's long-lost compositions, he is entitled to the gratitude and homage of all time. Around him we young fellows congregated with pleasure, and in animated disputes and discussions with us he renewed his youth. Introduced by him to the Florentine Quartette (the Becker family of Mannheim), we became habitués of their house, which gratuitously opened its doors only to those specially recommended by a person of consequence. There we thrilled to the eternal beauty of Haydn's, Mozart's, Beethoven's, Schumann's, and Schubert's chamber music, and there our souls first responded to the glory and the splendor of Brahms. The Mannheim Theater, with its great Schiller traditions, at that time rejoicing in an excellent ensemble that included some conspicuous stars, was no less an attraction to our susceptible little band.

A spring jaunt to Baden-Baden, when the pines showed dark against a border of fruit trees in their fresh light-green leafage and their vivid blossoms, I hold in grateful remembrance. How close to each other we felt! How friend Bernays romped on ahead of us all through meadows and forests! How he reveled in the opulence of the flowers, with the

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bees and butterflies and other insects hovering and humming about them! Of all things in nature he had knowledge, had interest for all, and from all he derived pleasure.

The fruits of his work with Gegenbaur are the two important monographs, "The Development of the Auriculo-Ventricular Valves of the Heart" and "The Development of the Knee-Joint, with Observations on Joints in General," both of which were published in Gegenbaur's *Morphologischem Jahrbuch*, the first in No. 4 of Volume II, 1876 (pages 478 to 518), with tables XXXII and XXXIII, and the latter in No. 3 of Volume IV (pages 401 to 446), with table XXI. Both are permeated with Gegenbaur's very spirit—the desire for the causal understanding of facts revealed by the most penetrating and all-embracing research; the combined methods of embryology and comparative anatomy brought to bear on the solution of the problem; the striving to connect the isolated findings, and by generalization to discover the far-reaching laws which govern them. But absolute originality is preserved by the author—all results brought to light are in the fullest sense of the word the property of Bernays. His spirit was but impregnated by that of his teacher.

It is not possible to reproduce in a few lines the rich results of his researches. Those who are inter-

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ested in such work will find them fascinating reading that will amply repay the student, for both treatises are distinguished by the lucid and forcible presentation of the facts and by the convincing power of their diction.

In the study on the auriculo-ventricular valves of the heart, continuing along lines previously worked by Gegenbaur, the exact proof is given by an unbroken chain of embryological findings that the auriculo-ventricular valves, together with the formations that belong to them, spring in the main from the myocardium of the chambers of the heart. Bernays succeeded, furthermore, in showing by the examination of early ontogenetic stages and the comparative study of lower vertebrates that this permanent development of the valves was preceded by a transitory stage of an endocardial nature, similar to that of the semi-lunar valves; that simultaneously the development of the tissues in the wall of the heart enter upon a gradual complication, and that even the fully developed heart may reveal to the practiced eye isolated stages of this development in unmistakable remnants of the earlier conditions.

His treatise on the knee-joint extends far beyond the consideration of this joint alone. Based on the examination of numerous stages of development, and taking into exact account the tissue changes, it

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gives a history of the growth of this joint and of joints in general. In opposition to former teaching, it is shown in this treatise that the specific shape of the joint surfaces of the cartilages which later form a joint are ontogenetically developed before the formation of the joint cavity, and at a time when, in respect to the movement of parts of the skeleton, muscles capable of functioning are not yet developed — that is to say, independently of any muscle action. It is only after this that the differentiation of the joint cavity and of all the associated apparatus occurs. The semi-lunar cartilages, the capsule, the crucial ligaments, and all accessory ligaments develop in loco out of the indifferent tissues which are situated partly between the cartilaginous ends of the joints and partly covering these; the synovial membrane is, from a developmental standpoint, a pure connective tissue, the inner surface of which is not covered with epithelium.

Both of these contributions of Bernays to research were investigations giving furtherance of uncommon importance not only to the science of the period of their publication, but even now, that thirty-four and thirty-six years respectively have elapsed since they were written, they remain absolutely abreast of contemporary anatomy. Indeed, within recent years the researches of Braus have corroborated in

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every point the correctness and the great importance of Bernays' work on the development of the joints. Along these two lines worked by him, we are indebted to Bernays and to his teacher, Gegenbaur, for the greatest advances made in this direction.

After Augustus Bernays had left Heidelberg in 1877, and had rejoined his family in St. Louis, stopping in London only a short time to take the degree of M. R. C. S., I heard and read of him on many occasions. I learned through some of his American colleagues how devotedly he was working for the good of his fellow-men, and of the appreciation and admiration he enjoyed in the medical and scientific circles of his country. The scientific publications he sent me from time to time attest the originality of his thought—"On the Relation Between Cells and Microorganisms" (Chicago, 1886), and his meritorious work in the service of surgery (Surgical Clinic, St. Louis, 1895). One of these papers bears the manuscript dedication, "In remembrance of the dear old days with Gegenbaur."

In the year 1905 I last had the joy of seeing him again in Heidelberg, together with his sister. Sorrow for the death of my only son, whose intellectual development had inspired such high hopes, prevented manifestations of vivid joy. But we understood one another instantly as of old, and our hearts grew

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warm in the exchange of reverential memories of our great master, who had died in 1903. There was a project afoot to place a bust of Gegenbaur in the Anatomical Institute of Heidelberg. Without my asking his subscription, friend Bernays contributed with a princely gift to the sum which was being collected for the erection of this monument. His manner in doing this, as well as his sympathy in what concerned me, was eloquent proof of the delicacy of his feeling, of the faithfulness and tenderness of his attachment. That was my last meeting with him.

There are emanations of the Psyche, full of momentary delight confined to the heyday of youth. Every creature is charming and attractive at the artless period of his springtime of life. With increasing age his horns grow, and in the struggle for life calculating egoism is bred and continues to increase to greater and greater proportions. Nearly all human beings pass through the stages of this development. Few, comparatively speaking, retain their unspotted youthfulness, their inner warmth, until the time of maturity. But only those who do are really worth while. Augustus Bernays belonged to this small class. Unto death he remained true to himself and to his ideals. To the last his heart beat warmly, beat impulsively, as in the days of his youth.

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Kindness of heart, gratitude, fidelity, idealism, and the indefatigable urge for truth, knowledge, and perfection were the unvarying stimuli of his life. I have often wondered with a touch of sadness that it should be so — why this man, who seemed created to make a wife happy and to found a family, remained unmarried. Did the watchful affection of the sister who ministered to his spiritual as well as to his material wants, who took an interest in his work, prevent his feeling the need of another attachment? Did he find no woman who corresponded to his high standard, measured by the sister he so loved and revered? Enough — he departed from us without leaving progeny.

Yet to us he is not dead. His work, his benefactions, his creations, assure him immortality — the lasting grateful remembrance of his contemporaries as well as of posterity.

In my own heart his memory is treasured as that of one of the noblest men I encountered in life.

CHAPTER VI

BERLIN, VIENNA, LONDON

Pleasure is the reflex of unimpeded energy.—*Sir William Hamilton.*

After August had had his little taste of managing a hospital in the fall of 1876 in Heidelberg, he went to Berlin for a special course under Langenbeck, the greatest surgeon of the time, whom he came to admire greatly and of whom he always spoke as the prince of surgeons. Langenbeck, too, lost no time in singling out August as superiorly gifted, invited him to visit at his house, and, after the surgical course in which August distinguished himself by his skill and readiness was finished, suggested to him, even urged him, to offer his services to Russia as an army surgeon in the war that country was then waging on Turkey. Of his own accord he furnished him with letters of introduction to Russian generals and diplomats. He gave him an authoritative letter for general use—in our country it would have begun, “To whom it may concern”—

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bearing the official seal and signed by him as director of the Chirurgisch-Klinisches Institut, of Berlin, which reads as follows:

26 April, 1877.

Der Doctor medicinæ A. C. Bernays, aus St. Louis, begiebt sich auf den Kriegschauplatz um der Kaiserlich Russischen Armee seine ärztliche Beihilfe anzubieten. Es gereicht mir zur Freude den Dr. Bernays als einen sehr tüchtigen, practischen Chirurgen auf das wärmste empfehlen, und als für die Leitung eines Kriegslazareths besonders geeignet bezeichnen zu können.

B. VON LANGENBECK,
Professor der Chirurgischen Klinik an der Universität zu Berlin.

Translated into English, the letter would read:

April 26, 1877.

A. C. Bernays, M.D., of St. Louis, is about to go to the seat of war in order to offer his medical services to the imperial Russian army. It gives me pleasure to most warmly recommend Dr. Bernays as a very thorough, practical surgeon, and to be able to mention him as especially fitted to take charge of a military hospital.

B. VON LANGENBECK,
Professor of the Surgical Clinic at the University of Berlin.

This, from the surgeon who, during that fierce and bloody struggle of the Franco-Prussian war six or seven years previous, had drawn the eyes of the world to his own achievements, was tremendous encouragement to a youth of twenty-two. Before

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August, however, made up his mind to show himself deserving of this confidence in his ability, and to turn to account this exceptional chance of winning distinction, the war ended.

In Berlin August heard the lectures of the most brilliant scientific men of that epoch of wonderful forward striding in science. In the one semester he studied there these men did not, of course, become endeared to him as his Heidelberg masters had been. Still, he gained a vivid impression of their personality, and always esteemed it a great privilege to have stood face to face with and to have actually heard the voices of such men as Virchow, Helmholtz, and Dubois-Reymond.

The old musical composer and director, G. Vierling, of whom Professor Max Fürbringer speaks in the preceding chapter, resided in Berlin during the winter. As an old friend of my father and uncle, he had promised to keep an eye on August, who was for the first time in his life left to his own resources in a metropolis. It happened that a sort of mentor and guardian did not come amiss. Soon after August's arrival in the big city, at a restaurant where August was supping with friends, a burly and boorish German student behaved with such rudeness that August's quick blood was up in resentment. Cards were exchanged, seconds chosen, and a duel

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arranged — August, with true American spirit, demanding pistols for weapons. In some way knowledge of the affair came to Vierling, who went to the greatest trouble to smooth out the ruffled feelings of the cocky combatants, and finally succeeded in inducing the prime offender to admit his rudeness in an explanatory statement and express regret, disclaiming the intention to insult. Thereupon the duel was abandoned.

August's companions in Berlin were of lighter caliber than his Heidelberg friends. He always smiled when he thought of them. One was a Spaniard named De Castro, another the rollicking Irishman, Charlie Tanner (who later became a notorious and quite obstreperous member of the British Parliament), and an American named Nightingale, of whose subsequent fortunes I never heard. The four were advanced in their medical studies, taking special courses, and less bound to hard and fast hours than students who had not taken their degree. In the evening they played as hard as they studied in the forenoon, some of them, from all accounts, harder. They were frequent visitors at the theaters, and especially devoted to the operettas and musical comedies then in vogue. Nor did they scorn the music halls, known at that time by the expressive name of Tingel-tangel. Professor Vierling fur-

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nished them tickets and occasions to hear more serious music, and drew them into the musical and artistic circles he frequented. It was in Berlin, too, that August began the practice he followed throughout his life of frequenting galleries of art and the studios of painters and sculptors, for the German capital even then possessed excellent examples of the best schools of painting, and, though not many originals of fine sculpture, at least casts of the great works that form the basis of study — an abundance for a beginner.

But it goes without saying that he hovered about the Charité every morning, and many an afternoon as well, and never afterward did he visit Berlin without going to this favorite medical haunt of his. Whenever we were there together he always dragged me thither, and showed me the scene of his exploits, dwelling reverentially on the great teachers he had there known who had died, but whose spirit he felt to be alive in himself and in the fellow-workers who had shared their guidance with him.

He always retained a liking for the peculiar tart wit of the Berlin people. The odd mixture of sauciness and good nature in their temperament appealed to his own fun- and spice-loving disposition. Their very dialect attracted him — unpleasing and unmelodious as it is — because of its drastic effects,

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and, though he had not in an intimate sense mastered its vocabulary and its excrescences of accent and of grammar, he sometimes attempted to use it in a modified form in order to give local color to some story or reminiscence. The Berlin type of woman was also to his taste — fair-haired, buxom, pink-cheeked, healthy, light-hearted lassies, quick and pungent at repartee, never backward in manner. Their vivacious prattle, their frank enjoyment of the superficial and sensuous pleasures of life, the undisguised and sometimes slangy expression of their feelings and desires, amused him and appealed to the child in him, which, indeed, never quite grew up. In every way the Doctor made the most of his winter in the German capital, observing, assimilating the ways of the bigger world, while intent on perfecting himself in his specialties.

It was in Berlin that he was induced by Dr. Frederick Dennis, of New York, at a dinner given by Langenbeck, to enter the examination for the degree of the Royal College of Surgeons of England before returning home to engage in practice. The consent of our father to pass another examination was not difficult to obtain. Previous to his taking this step, however, eager to see every phase of the development of modern surgery, August repaired to Vienna for the summer semester and took a course under

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Billroth, then at the height of his fame and his popularity. Billroth was the darling of the aristocratic ladies of the gay Austrian capital, a handsome and magnetic man, whose achievement as a pianist added an artistic nimbus to his halo as a great surgeon. August was, however, not as strongly attracted by him as he had been by Simon and Langenbeck, and seems to have absorbed less from him than from his former teachers. He was brooding, too, at that time over the work on the knee-joint begun in Gegenbaur's laboratory during the Easter vacation, and was eager to be back in Heidelberg to work out his ideas. The only friendship I remember that he formed in Vienna was one with Walter Stallo, eldest son of the Cincinnati judge, afterward our ambassador to Italy, which was of short duration, as young Stallo died of consumption soon after his return to the United States. Evidently the pall of death already hung over this youth when August knew him, and aroused his pitying sympathy. It called forth a response of feeling in the young man of a more than usual fervor. August told me once in a wondering, subdued, half-hesitant fashion that Stallo had kissed him on the day they parted — a touch of most unusual demonstrativeness on the part of an American youth.

London the Doctor enjoyed, as he had Berlin,

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with the vivacity and buoyancy of his twenty-three years. He probably read up a little for the impending examination, and most assiduously visited the hospitals and clinics where the foremost surgeons could be found, making the acquaintance of Sir Joseph Lister, Sir Spencer Wells, and others whose names I do not recall. I still preserve the blue and yellow cards citing him respectively to the anatomical and physiological examination on November 7th at "two forty-five precisely," and to the pass or final examination at "four fifteen" on November 13th. They are signed Edward Trimmer, secretary, and required first the payment of five pounds five shillings and again of six pounds fifteen shillings — not a great sum considering the pleasure and profit derived.

Albert Bernays, cousin of my father, professor of chemistry at St. Thomas' Hospital, London, was at the time one of the renowned scientific men of England, an author of many works in his specialty. His eldest son, Sydney, a little older than August, was also a medical student, and the two young men quickly became friends. August lived in modest lodgings on the Lambeth Road, on an allowance so slender that in after years, when he had become somewhat of a spender and a gourmet, he was often moved to smiles as he thought of the frugal fare

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on which he had there subsisted. Mutton chops and baked potatoes were the delicacies he knew in those days, a rather monotonous diet, furnished him by his landlady. She was a kind and cheery soul, he used to say, and saw that his Spartan fare came at least piping hot to his room. He visited the family of Professor Albert Bernays frequently, where, with British scorn of the foreign name of August, they called him by his second name, Charles, and the visit of Dr. Charles remains a memory, or rather a tradition, with the only surviving son of this family, then a very young child. As cousin Charles, August was also introduced to the family of Edwin Arthur Bernays, the engineer so efficient in the building of the Chatham docks. Sydney and he often called at the Chatham house, where the main attraction to them was a group of pretty daughters. "Going over to kiss the Chatham cousins," they called these excursions. It was through Professor Albert Bernays that August was presented to Huxley. He was invited to the Huxley residence for Sunday evening tea, where, as he frequently related with joy and reverential awe in the remembrance, he once had the great good fortune to see Charles Darwin, leaning on the arm of his wife, enter and join in the evening's discussion and recreation.

The degree of M. R. C. S. acquired with flying

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colors, August embarked for home in December, 1877, on a steamer called *America*, which a day out from shore collided with an Italian bark, with disastrous results to herself, but no loss of life. The passengers were obliged to help the crew pump out the water that rushed through a hole in the side of the vessel, and she had to be towed back to port. Whether August waited for the completion of her repairs or took another steamer, I do not remember. He arrived at home just before the New Year of 1878.

My father, with all the family except Clem, who was left in Heidelberg to complete his chemical studies, had returned to St. Louis in the previous May. In order to be in closest touch with his brother, he had purchased a house adjoining that of uncle Charles, on the corner of Eleventh and Chambers streets. There he resumed his practice, launched August on his career, and there he died, eleven years later, on December 16, 1888.

CHAPTER VII

PREJUDICE AND SUPERSTITION

Better a day of strife
Than a century of sleep.—*Father Ryan.*

Of the average youth who hangs out his sign, A. C. Bernays had a tremendous start. He came into a growing city of the Middle West, fortified not only with youth and health, and the ordinary degree of accomplishment, but knowing, as he must have known, that, exceptionally fitted out by nature, he had had exceptional opportunities which he had used with exceptional diligence and enthusiasm. The best educators of the world had trained him for a career he loved, had unanimously manifested a warm and special interest in him, had drawn him into their intimacy, and had supported his innate confidence in himself by testimonials which admitted of no doubt as to his capacity and equipment for his profession.

Nature had been lavish toward him. She had given him senses which were well-nigh perfect.



**DR. BERNAYS IN THE YEAR HE ENTERED ON THE PRACTICE
OF HIS PROFESSION IN ST. LOUIS.**

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His eyesight, hearing, and senses of smell, taste, and touch were keen with an alertness that was doubly valuable to one who knew how much depended on their instantaneous and exact action and reaction. They had come unimpaired through a childhood that was singularly free from influences deteriorating or contaminating to health, free from overtaxation and harmful excitements. They had first been trained in the observation of nature under the guidance of vigilant parents, and afterward, when he specialized for his profession, under that of his supreme European masters. His very occupation, which emphasized primarily the functions of the body, made him necessarily conscious of his advantages in this respect, and laid on him as a duty that which was at the same time a delight — the perfecting of his sense perceptions. Some one said of him once that he had lamps at the end of his fingers, so delicate, so intelligent, so illuminated from the brain was his touch. But, besides the lamps at his fingers' ends, he had eyes behind his eyes and ears behind his ears, the *flair* of the hunter, the tongue and palate of a gourmet, and, above and beyond this, his physical senses were exalted and sublimated by flashes of a powerful imagination. A system had thus devised itself in his body and mind of recording and associating impressions and

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drawing conclusions, so swift and sure that it partook of the phenomenal and struck not only the layman as mysterious and savoring of the miraculous.

After an absence of eleven years from the scene of his former activity, my father's efforts to reestablish his practice in St. Louis were beginning to have effect. His reputation for conscientious work when August arrived had not been entirely forgotten, and he was soon able to give the boy a chance to exhibit his knowledge. Lister had a few years prior inaugurated the era of antiseptics, and the Germans eagerly took up his ideas and perfected them. To August, asepsis appealed strongly from the first. To exclude the possibility of infection, or at least to minimize the danger of it, was, he knew, the *sine qua non* of success in surgery. In word and deed he became one of the most insistent and effective pioneers of asepsis, and some of his devices and methods for sterilizing and cleansing whatever may come in contact with the patient are now in use with a majority of his colleagues in various parts of the world.¹

¹ One of Dr. Bernays' practical devices must have made and is still making fortunes for those to whom he gave the idea. The Bernays tablets have been in use since 1886 or 1887, I am told, and are universally used in sterilizing, before operation, articles that may come in contact with the patient. They are prepared by triturating bichlorid of mercury with citric acid, and even the general public now buys them.

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In St. Louis, until he arrived on the scene, laparotomies had had a fatal habit of terminating in Bellefontaine or Calvary Cemetery, so that the practitioners then accounted most skillful had tabooed these operations. In an astonishingly short time this condition changed. August's cases of laparotomy — some of them involving large ovarian tumors now rarely seen — recovered with regularity and promptness, whereupon, with characteristic inclination to superstition, his "luck" — not his superior skill — was first commented on as a phenomenon.

It must be remembered that at that time there was not a hospital in St. Louis which would not now be condemned as utterly unfit for the scene of major operations. Perhaps this insufficiency was instinctively felt by the public. At any rate, there was a reluctance on the part of people able to care for their sick to send them to a hospital, so that a great part of his operative work had to be done in private houses under circumstances necessarily most unfavorable. Such conveniences and such insurance of freedom from the dangers of infection and other

Long before the Doctor died they had circled the globe, and acquaintances wrote to him that they had employed these tablets in Australia and South Africa. Another practical invention of his, the Bernays sponges, commended by Senn in his book on surgery, were used by our surgeons with success throughout the Spanish-American war.

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disturbances as are now universal, my brother's work knew not for many years after he began. Over and above these dispiriting drawbacks, prejudice and superstition on the part of the family and friends of the patients sometimes added special and grotesque horrors to the situation.

Dr. Barck once described to me an operation executed with his assistance by my brother under circumstances that would have paralyzed a man of less indomitable nerve. It was during the time Dr. Barck and my brother were associated in conducting a small hospital on Chouteau avenue and Ninth street in the early eighties of the last century. The patient, a negro, was suffering from an immense growth on the femur. The operation had to be performed in his miserable hovel with the help of Dr. Barck, the only other person present being the negro janitor of their hospital, who was to clean up before and after the surgeon's work. The colored people of the neighborhood, Dr. Barck told me, somehow conceived the idea that an unjustifiable experiment was being attempted on one of their race. Armed with cudgels and coal shovels, and whatever instruments of vengeance first came to hand, they began to gather on the threshold and cluster round the windows of the scene of action, with murmurings that soon grew to loud threats.

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When the door was barred in their faces, some of them made a rush for it, hoping to batter it down, but luckily it was strong enough to resist. Meanwhile the operator went on with seemingly perfect unconcern, and with unperturbed swiftness and dexterity, with his difficult work, calling on his aid for what assistance with needles and instruments the case exacted, without so much as betraying that he knew he might never finish his task — might be obliged to defend his life. The operation completed, the young surgeon stepped out and harangued the mob, showing the ugly specimen he had removed from the unfortunate man's thigh, and explaining that the patient had been given the only chance for his life and future usefulness. His manner was so frank and assured, and the *corpus delicti* so convincing, that the group dispersed abashed and awed. The negro got well and lived for a number of years. To the poor, ignorant creatures the deed seemed uncanny. August told me several times, when coming home late, as we passed a lonely spot or waited on some dark corner for one of the slow horse or mule cars of those days, and I expressed some alarm, that he was not afraid of the negro as many people are. Most of them, he said, knew of him and his work, for news travels fast among them by word of mouth. He believed that in their superstitious

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minds the idea had become fixed that he possessed supernatural powers and a charmed life. Another reason — one he did not mention — which insured him a certain amount of safety was the fact that he was constantly extending kindnesses to the wretched and improvident of their race, who were then even more numerous than they are now. He did not despise them, but for them, as for all living things, he had a feeling of tenderness and pity. To him they were merely undeveloped — many stages behind the Caucasian race. With his faith in the possibilities of evolution, with his knowledge of the progress that may take place, even if centuries multiplied by centuries are required for the consummation, he had no harshness, no uncondoning condemnation, for their crudenesses and their savageries. His patience with them was even greater than with white people when, on rare occasions, we had colored servants. Their habitual shortcomings of shiftlessness and unreliability I found most trying, and I did not hesitate to have them up for a good scolding when I thought they needed it. Of such severity the Doctor disapproved. Their oddities of speech, their quaint conceits, their cheerfulness and spurts of characteristic humor, their sometimes direct and practical — oftener devious and prejudiced — ways of reasoning amused him. He never

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wearied of chuckling at their peculiar mental antics any more than he ever grew tired of watching the gambols of cats and dogs, the movements of horses or birds, or of any creatures that drew the breath of life.

His controversy with the St. Louis Medical Society on questions of the code of ethics occurred in the very early years of his practice. Charges were brought against him for violation of this ancestral instrument on the ground that the newspapers had on several occasions printed articles commenting on his novel and successful work. He considered it a far greater wrong to make a mystery of medical science — to hide the discoveries as well as the mistakes made by the profession — than to fail of homage to the obsolescent code, so that when it was proposed to “investigate” him by a committee appointed of this body, he curtly and brusquely sent his resignation, to take immediate effect, which was, of course, accepted.

This severance of connection with the medical society was an apparent hindrance to him in his career, both because it prejudiced some wealthy citizens — not in the habit of doing their own thinking — against him and because he was prevented from reporting and exhibiting his cases, and proving his skill, before the largest body of medical men in the

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city, organized to assemble regularly and to discuss subjects of mutual interest. On the other hand, to be left standing alone in the open, on principles of progress, good sense, and frankness, in opposition to old fogyism and ancient formalism, draping itself in empty dignity and enveloping itself with foolish mystery, made him the Ibsenesque "strong man" — steeled him for the fight and showed him, in his isolation, brave, undaunted, a pioneer of "more light," a blazer of new paths.

CHAPTER VIII

EARLY SUCCESS—CURIOUS CASES

Dispatch is better than discourse. The shortest way of all is doing.—*Anon.*

Young Dr. Bernays thus soon became the synonym of masterfulness. The timid, the wary, the envious of the fraternity shook their heads, and solemnly warned their acquaintances that his “experiments” were unjustifiable, unwarranted, unethical. All this did not keep the “experiments” from saving life after life that had been despaired of by those who had neither the skill nor the courage to cope with seemingly hopeless situations. After a while it began to dawn upon some of the younger doctors, and then even upon the older element of the profession, that it was not blind luck that accompanied mere intrepidity in his work, but that a phenomenal familiarity with anatomy, rare foresight, swiftness, skill, and resourcefulness were the firm foundation of these exploits.

To make an ideal surgeon, the scientific man must

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combine with the artist. This rare merging took place in my brother. He defined science as "the knowledge of the laws which govern the universe." In the sense that he knew the laws which govern the human organism as well probably as any living surgeon, he was a scientific man of great qualifications. As every one who ever witnessed an operation of his attests, he was also an artist. His natural deftness, readiness of decision and quickness in action, together with his mastery of the technic, made his work in the doing as well as in the result esthetic, artistic.

He told me once that plastic operations were his forte. One who is certainly well fitted to judge, Dr. Willard Bartlett, says that he did plastic work better than any other surgeon he has ever seen. To quote Dr. Bartlett further: "In goiter and refined dissecting operations about the neck his work shone, because he knew his anatomical ground so exactly, and could avoid the veins and arteries that lie thickly in that region and are so dangerous to tap. One of the operations he did particularly well was resection of the lower jaw. In the hands of most surgeons this is a dirty, bloody job, but your brother, somehow, was able to accomplish it with dexterity and dispatch, and little loss of blood."

All his life he took the greatest interest in this

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branch of his art, and in the course of his extensive practice accomplished feats that to a layman appear hardly credible, as when in 1892 he did the terrible operation mentioned in Dr. Cottam's bibliography, at the end of this volume. The French *Revue Internationale de Rhinologie, Otologie et Laryngologie* promptly asked and received permission to reprint the account of this extraordinary performance, in which he seems to have removed about half of the patient's face, prolonging life for over a year. Harelip, the making of new noses, skin transplanting, all work in which accuracy of eye and delicacy of hand are essentials, brought out the artistic side of his endowment. In making a new nose, his wonderful eye for dimensions showed itself best. Dr. Bartlett, speaking of this, said: "In reconstructing the nose he always cut the flap of exactly the right size from the forehead."

Brilliant diagnoses, with concomitant operations to prove them, kept bringing out the inner vision the young doctor had of the pathological conditions. Of some of these that happened early in his career I have accounts in my scrap-book. One was a nephrolithotomy, an operation for stone in the kidney. The case had been seen by various surgeons in Chicago, St. Paul, and Minneapolis, none of whom had been able to determine what ailed the

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patient, who for twelve years had been suffering with attacks of cramps in the abdomen. After a thorough examination, young Dr. Bernays, by exclusion, arrived at the idea that the man had stone in the kidney. Chemical and microscopic analysis substantiated this opinion, which the operation, brilliantly done, verified. The young man made a rapid recovery, and returned to his home in the North, leaving in the Doctor's hands as a trophy the stone, about the size and shape of a lima bean, studded all over with shining crystals — a "beautiful specimen." Only about twenty-eight cases of the kind were previously known, so that the instance was conspicuous for rarity as well as for difficulty of diagnosis and success of the operation.

Assurance and self-confidence — innate gifts of my brother — naturally grew with the repeated performance of extraordinary feats. But if a certain boastfulness sometimes got the better of his truer self — which toward the great pathfinders in science was all modesty, and, in the face of what remained to be accomplished, all humility — he was at least able to substantiate boasts. Many a time when he had an ovariectomy to do, not where all was in readiness, arranged by trained persons, in a well-appointed hospital, but in an ordinary private house — rarely in the residences of the rich — he would

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bet that he could do it in five minutes, and win his bet. Such being his capacity, nothing could keep him from forging rapidly to the front rank. Neither could anything keep the major part of his colleagues all over the world, nor yet the public at large, from recognizing his superiority. From neighboring states physicians began to clamor for an invitation to his clinics, and medical men of note going East or West, in passing through St. Louis, stopped to make his acquaintance. His liberality and generosity in imparting information became a byword. He made no distinctions, recognized no caste feeling. The humble and unknown were made as welcome as the wealthy, the experienced, the distinguished, and the influential. Homeopaths and eclectics were not excluded, nor scorned in intercourse, nor refused a meeting in consultation.

For a period of years he published his results in a series of papers he called "Chips from a Surgeon's Workshop." Later he contributed frequently to various medical journals — not always to the most renowned, but as his unfailing good nature dictated and with his characteristic inability to refuse an article when it was demanded, even though it meant burying a novel and valuable idea in an obscure publication. For a year, or possibly two years, he was engaged in general practice. Very soon, however,

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he limited himself to surgery, refusing to see cases which had not first been seen by the family physician and by such a one referred to him. He was the first surgeon in St. Louis, and to within a very few years of his death the only one, who both proclaimed and practiced this exclusiveness.

He kept up an extended correspondence with medical men all over the world on the subject of cases, views, differences of opinion, or concordances of theories. Among his peers in the United States this exchange of letters was most frequent with Nicholas Senn, of Chicago, and Howard Kelly, of Baltimore. Both of these friends he often met either in their home cities or whenever they visited St. Louis, and with both remained, as long as he lived, on the most cordial terms. In the case of Dr. Kelly this was remarkable because of their antipodal convictions on religious matters. This proves conclusively that where my brother encountered true piety and genuine belief, supported by the practicing of the preachment, in an intellectual equal, he not only tolerated, but respected, the tenets held. Dr. Kelly, from letters found in my brother's files, was as much grieved at my brother's attitude of agnosticism as Dr. Bernays was amazed at and lacking in understanding of the type which clings to an authoritative creed, claiming to possess the whole

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truth, while serving and studying science. To my brother may be applied what John Jay Chapman, in his beautiful essay on "Learning," thus expresses: "In the higher regions, in which science is synonymous with the search for truth, science partakes of the nature of religion. It purifies its votaries; it speaks to them in cryptic language, revealing certain exalted realities not unrelated to the realities of music, or of poetry, or of religion. The men through whom this enthusiasm for pure science passes are surely, each in his degree, transmitters of heroic influence, and in their own way they form a kind of priesthood. It must be confessed, too, that this priesthood is peculiarly the product of the nineteenth century."

Such sensational and dramatic circumstances attended some of the cases that came to young Dr. Bernays that they could not escape wide publicity. From the first he refused to work in the dark, convinced that the most glaring light could not harm a fair man who was honestly seeking truth. With utter scorn, heedlessly and frequently expressed, he looked upon those who would not teach to all who could learn the special artifices and devices they had found to alleviate suffering and restore health. It was Dr. Bernays who scored when one of his bitter opponents, a man of position and reputation, said,

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"Bernays is a fool to teach everybody the tricks and secrets of his profession."

Perhaps the case which was most widely discussed, because of its extraordinary rarity and an element of grotesqueness that attached to it, was the gastrotomy for the removal of a swallowed table knife. In South St. Louis, on November 17, 1886, a tailor named Joseph Hoffman, in the exhilaration consequent on a supper, accompanied by copious draughts of beer, was exhibiting his skill as a sword swallower, a trick in which he had some previous experience. On that occasion the knife which he had inserted into his esophagus slipped from his fingers and entered the stomach. Dr. Hugo Kinner, the family physician, was called in. He at once telephoned to our house, and was informed that the "young Doctor" was giving his sisters and some friends a theater party at the Olympic. So he called up the theater. I remember the knock at the door of the box, August's swift disappearance, and radiant reappearance a few minutes afterward, saying in a loud whisper of distinct delight to Dr. Barck, who was of the party, "A man has swallowed a knife; come on, Barck." Then rapidly commending his sisters to the care of the remaining male guest, he departed with eager, shining eyes.

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Early next morning I knocked at the door of his room, which was above the office in a separate building on Eleventh street, next to our residence on Chambers street. He opened the door quickly, and before I could speak pulled a silver-plated, ten-inch table knife out of his pocket, saying, "Here it is," and, chuckling with glee, related the details of the extraordinary adventure. The man recovered within a fortnight, and was not a bit the worse for having harbored for an hour or so in his stomach so strange an object, nor for having undergone the operation on a hastily prepared extension table in his humble home by the light of a few coal-oil lamps, borrowed from and held by the neighbors who volunteered to do such service, while they looked on at the weird spectacle. When my brother called on the subject of the adventure the following morning he found him so unconcerned that his first question was, "Doctor, when can I have a drink of beer?" After his recovery he got many a treat of his favorite beverage at the expense of people who enjoyed hearing him tell the story and describe his sensations of that night. The waltz song, "Anna, zu Dir ist mein liebster Gang," from the operetta, "Nanon," which we were witnessing that night, as popular for a time then as the Merry

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Widow waltz came to be in recent years, inevitably conjured up in the minds of all our family the vision of the tailor who swallowed the table knife.

An important and unusual case was that of Murty O'Sullivan, a policeman who, in the pursuit of a criminal, was shot through the abdomen. It was the first gunshot wound of the abdomen which was successfully operated upon west of the Mississippi, and also the first of the series of five which were described in the paper my brother read at the Congress of Surgeons that met in Berlin in 1890. Dr. W. W. Graves had at the time just become my brother's assistant, and of his own volition remained in the O'Sullivan house to watch and help nurse the case until the danger point was passed. He was very much impressed by the remarkable control the Doctor exercised over this patient, as well as over many subsequent ones they saw together. "Your brother spoke little, but that little was brought out with such earnestness and emphasis that it banished doubt from the mind of the sufferer," Dr. Graves told me. "Somehow he also suggested that the patient had to do his part." In the O'Sullivan case, after finishing the work that night, he merely said, looking the patient in the eyes, "O'Sullivan, damn you, you lie still or you'll die." The rough speech, kindly for all that, as was indicated by the tone of

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the voice and the expression of the face, had such an effect on the wounded man that he hardly moved a muscle for several days; nor asked for a mouthful of food, which was, of course, forbidden. Nutrient enemata were administered, which Dr. Graves sampled for temperature, while the patient watched with a wistful look on his face, breaking out once — to Dr. Graves' infinite amusement — with the plaintive question, "Doctor, does it taste good?"

The Municipal Assembly, in a burst of genuine admiration, went out of its way to pass a special ordinance to pay my brother for his services in saving the life of an officer of the city. For the sake of curiosity I here reprint the ordinance:

(15,009.)

AN ORDINANCE TO PAY DOCTOR A. C. BERNAYS FOR MEDICAL ATTENDANCE ON A MEMBER OF THE POLICE FORCE.

Be it ordained by the Municipal Assembly of the City of St. Louis as follows:

Section 1. The sum of five hundred dollars is hereby appropriated from the fund to pay Doctor A. C. Bernays for medical attendance on Murty O'Sullivan, a member of the police force, from June to September, 1888, who was injured in discharge of police duty on June 26, 1888, and the auditor is directed to draw his warrant on the treasurer for the above amount and deliver the same to Doctor A. C. Bernays, taking his receipt in full.

Section 2. There is hereby appropriated and set apart out

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of the Municipal revenue, to pay Doctor A. C. Bernays, the sum of five hundred dollars.

Approved March 30, 1889.

Murty O'Sullivan became a life-long friend and protégé of the Doctor. His dear old Irish face and accent appeared at our house ever after when he thought he could be of use, or felt that his sympathy was due, as well as whenever one of the young O'Sullivans needed advice or encouragement, or the influence of a kind friend to obtain him or her a position. Murty, his usefulness in the police force over, subsequently sought and obtained a comfortable place as warden in O'Fallon Park, where he long remained a characteristic figure, whom some of the frequenters of the park may remember.

Many striking cases of my brother's — dramatic from the point of view of the outsider — never got into medical literature. My brother early became overwhelmed with the press of operative work, to which was added his teaching. As will appear later, he selected the most strenuous manner of relaxing, and was temperamentally so organized that he did not insist on the working out of his records by his assistants or secretaries. Only a part of his notable work, therefore, came to the notice of the profession at large, though some of it was, of course, circulated by word of mouth or private correspondence, and

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in that manner added to his immediate reputation. Occasionally a reporter snapped up something out of the common of what he was doing, as, for example, I have before me a report from the *Globe-Democrat* of a delicate and dangerous operation he did for the recovery of a set of false teeth swallowed by a fireman in his sleep. Judging from the details and the mention of the name of Dr. W. F. Thornton, the first regular assistant my brother had, and from the fact that Thornton went to Nicaragua in 1883, it must have been early in that year that the affair happened. It will be observed that the operation was done in a private house, that there was, of course, no x-ray apparatus to locate exactly the swallowed object, that the patient had gone from doctor to doctor, none of whom improved matters, before Dr. Bernays, several days after the accident, was called in. The following is the account of the *Globe-Democrat*:

TEETH IN THE THROAT — PERFORMANCE OF A DELICATE OPERATION TO RECOVER A SET OF FALSE TEETH.

A party of doctors stood over the prostrate figure of a man in an upper room of the house No. 1120 Biddle street yesterday morning, watching earnestly the efforts of a short, wiry, black-eyed colleague to extract with a pair of forceps a set of artificial teeth that was located in the man's esophagus. The effort was fruitless, and, after a short consultation, it was agreed that an operation should be performed. The

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teeth had been previously located by the introduction of a sound through the mouth. They were found to be situated in the esophagus, an inch above the articulation of the clavicle with the sternum. The most intense interest was then manifested in the operation. The chief figure, the short, black-eyed man alluded to, rolled up his shirtsleeves and cast his eye over a glittering array of instruments, the patient in the meantime being placed under the influence of chloroform.

The patient was Joseph McGowan, a fireman by occupation, and about 35 years of age. On the night of April 3d, as the clock in a church tower close by struck the hour of midnight, McGowan awoke to the realization that he had swallowed a small jagged rubber plate which held together four upper teeth. Alarmed for his life, he immediately sought the services of a well-known surgeon, who, after learning of his trouble, sent him to a more distinguished brother. The latter doctor treated him until Thursday morning, confining the exercise of his professional skill, however, to the work of pushing the teeth down the throat, with the purpose of having them pass into the stomach. The teeth refused to entirely go down, and, wild with pain and weak with a fortnight's absolute fasting, McGowan sought Dr. Bernays. It was Bernays, with a corps of assistants, who surrounded McGowan when a *Globe-Democrat* representative was ushered into the house yesterday morning.

Selecting the proper instrument, Dr. Bernays, at exactly 10:05, made an incision three inches in length along the anterior border of the sternocleidomastoid muscle in the left side, or, in other words, he cut a three-inch gash at the bottom of the neck, just above the breastbone, and along the line of the collarbone. Then, picking up a blunt, pointed dissector, the doctor inserted it in the wound and pushed important blood vessels aside to the left and the trachea and thyroid gland to the right. The esophagus then being exposed, the doctor inserted his finger and announced that he distinctly

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felt the plate and the teeth. He opened the esophagus very slightly, introduced a blunt, pointed knife and enlarged the opening sufficiently to extract the teeth. As the plate came to light the greatest enthusiasm was manifested by the spectators, each of whom examined the ugly body which had so nearly cost the man his life. Dipping a sponge in a basin of water, the little doctor began the work of cleansing the wound and sewing together the skin that had been separated by the knife. Before closing the wound a rubber tube was placed in it for drainage purposes. Dr. Bernays then smartly rapped the patient on the cheek once or twice, and aroused him from the stupefaction in which the chloroform had placed him. A gleam of intelligence shot across the dull eyes of the patient as the doctor held the teeth before them, and the mouth broke into a grim smile. "He's all right now; put him to bed," said he. The patient had been lying on a table, and, indeed, he seemed to be all right, for he walked a few steps alone. Before being placed in bed he was given a glass of milk, a part of which he swallowed. Some of the milk escaped through the severed esophagus and dripped through the rubber drainage tube.

It was a very daring operation, and one of the doctors present said that few men could have done it. The difficulty lay in the fact that all the important arteries and blood vessels are in the throat. The operation has never before been performed in this city, and but seldom in the United States. It will, therefore, be read with interest by all interested in surgery. It was concluded at 10:30, the time occupied having been exactly twenty-five minutes. The quantity of blood lost was less than two ounces.

It is significant of the advance made in science to contrast with the above a letter my brother wrote, twenty years afterward, to his friend, Dr. G. G.

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Cottam, about a case of foreign body in the throat. Hasty and scrappy as the letter is — as nearly all my brother's letters were — it gives in the fewest words a history of the case, his connection with it, the description of the operation, and the result. Besides that, there is in it an exhibition of my brother's bonhomie, his gay comradeship with a former pupil, his delight in the good work of others, his readiness to do whatever he could for his friends — in fact, it is like a lucky snapshot of the Doctor's personality in one of his most endearing moods. I give it, therefore, *in toto*:

ST. LOUIS, February 28, 1903.

My Dear Cottam:

If I go to New Orleans, which I am almost sure to do, I shall be very glad indeed to have you for a traveling companion — without the toothache, if you please, but any old way, if it must be.

I spent four days with the Mayos just before New Year, and was much pleased and instructed by what I saw while there. They certainly have fine material to work on, and do full justice to their opportunities. Charley and I went from there to St. Joe together. We had a good time every minute.

Day before yesterday I had one of the finest surgical cases I ever saw to operate on — a large brass-headed upholsterer's tack just below the bifurcation of the trachea. It lay in an abscess cavity, containing about two ounces of stinking pus. Tack had been swallowed six months ago; boy treated for pneumonia, tapped for pleuritic effusion, etc. Finally the mother remembered that the boy had said he swallowed a tack several weeks before the pneumonia began. X-rays lo-

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cated the tack beautifully. Median incision down to trachea, then by careful blunt work with fingers followed trachea down to near the bifurcation, then long incision of trachea, cutting eight or nine rings in anterior median line, then caught tack by point. On pulling it out a large abscess ruptured, nearly drowned the boy; but let all the pus, etc., run out (head down). Boy is now O. K. Had intended to saw sternum down median line and spread apart, if necessary, but nimble fingers worked successfully. Boy is normal and will recover.

Yours always,

A. C. BERNAYS.

I have occasion to mention your name, and always take pleasure in doing so in places where it will do you good. My regards to Knott when you see him. I like him.

G., a Philadelphia insurance detective, told me a good one on you. He is your friend.

A. C. B.

In these days, when many surgeons restrict themselves irrevocably to only a small part of the anatomy, the range and experience Dr. Bernays acquired even in his youth over the entire physique seems wonderful. He was convinced that anything another could do in surgery did not lie beyond his power. During the brief twenty-nine years of his activity his alert eye overlooked nothing in the literature of surgery. Whatever others claimed was feasible he studied, tried, improved upon it if he could — adopted it if successful, or dropped it if results, in his opinion, failed to justify the risks taken.

CHAPTER IX

SIGNIFICANT YEARS

Go on and work with all your will — uproot error.— *Carlyle*.

About 1887 my brother's work seems to have increased tremendously. There are ten important papers in the list compiled by Dr. Cottam dated 1887, ranging over a wide field of operative surgery. Three cases of total excision of the tongue are treated in one, four craniotomies in another, then a case of pylorotomy with rare complications, a new surgical operation for the treatment of cancer of the stomach, a new operative procedure intended to supplant herniotomy, a case of complete transverse section of the Achilles tendon by the sharp edge of a spade, etc. Many of them involved original work devised by Dr. Bernays, and the conclusions reached and the general deductions drawn were always important and interesting — sometimes epoch-making. A number of these articles are profusely illustrated. Early in 1888 he contributed the

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article entitled, "The Origin of the Foramen Cæcum Linguae, as Shown by an Operation on a Rare Tumor of the Root of the Tongue — A Preliminary Note," to the *St. Louis Medical and Surgical Journal*. He speaks of this paper in the chapter on "Scientific Contributions" in his "Golden Rules of Surgery," saying that "an American surgeon must be credited with the neat little scientific discovery for which embryological studies made at Heidelberg laid the foundation." It seems that this tumor had never before been described, and only about twenty of the kind have since been found and reported. It is a goiter situated entirely within the tongue, "extending from the pyramidal process of the thyroid gland to the foramen cæcum on the back of the tongue." "I plainly expressed my opinion," says my brother, "that this tumor was developed from epithelial cells which were left in the track of the thyroid gland, as it developed from the primitive epithelium or head gut," and added that Dr. J. Bland Sutton, of the Chelsea Hospital, quoted this paper in his work on "Tumors," published some six years afterward (in 1893, I think).

At the suggestion of Dr. W. Bartlett, who told me that Dr. J. Bland Sutton had spoken appreciatively of my brother, I called on the English surgeon while in London in the summer of 1910, and had a

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rather strange interview with him. To my medically ill-prepared mind the passage from which I have just quoted from my brother's book was not present, nor had I the faintest idea that it would be a question of priority on which I should be interviewing the English surgeon. I had a note-book and pencil with me, however, and took down his statement as follows:

About 1886 I conceived the idea of writing a book on tumors on a morphological basis. I had been writing papers on morphological pathology when I received through a friend a number of the *St. Louis Medical Journal*, volume 55, containing a paper by Dr. A. C. Bernays on a peculiar tumor of the tongue, in which the author of the article attempted to associate the growth of this tumor with the thyrohyoid duct found by Professor Hies of Leipzig. It was a very interesting paper, and in a series of lectures which I published I referred several times to that paper.

On a visit of Dr. Bernays to England some time afterward he came to see me. He said he wanted to know me because it was so rare to find a young author appreciating the work of a contemporary. He told me that at Heidelberg he had studied with Gegenbaur, and had asked Gegenbaur to suggest lines of work to him. Gegenbaur advised him to take up tumors, adding that the classification of tumors would never be put on a sound basis until they had been viewed from a morphological and embryological standpoint. When he went back to St. Louis after completing his studies at Heidelberg he intended to carry on work on these lines. His first effort was this paper on tumors of the thyroglossal duct. To his astonishment he received nearly at the same time my

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volume in which tumors were first treated on a morphological basis.

We spent several afternoons together at the London hospitals, and thereafter followed each other's work. Dr. Bernays' work astonished me, because American surgeons at that time were busy operating only—doing practical work exclusively, as indeed they admitted. To receive out of the Far West a contribution to a scientific treatment of the very subject I was myself studying in this way came, therefore, as a great surprise.

Late in March, 1888, my brother again embarked for Germany. He went this time to attend the German Surgical Congress, as well as to visit the hospitals of some of the North German cities. Two letters published in the *St. Louis Medical and Surgical Journal*, one dated April 8, 1888, and the other May 5 of the same year, give an account of the sessions of the Congress, and discourse on other scientific matters in his own lively and racy fashion. His style, however, at that time was not perfectly formed, and not as forceful as it later became when the influence of the German had been entirely shed, and he wrote, as he operated, with a sort of lightning effect. I reprint the letters as documents indicative of the Doctor's convictions on a variety of subjects at the time. His opposition to ether, so vigorously expressed in the second letter, was of course later abandoned.

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LETTER FROM BERLIN — THE GERMAN SURGICAL CONGRESS.

HOTEL DU NORD, UNTER DEN LINDEN.

BERLIN, April 8, 1888.

Editors St. Louis Medical and Surgical Journal:

The steamer Eider made a fast trip from New York to Bremen—about nine days from port to port. We landed early Tuesday morning, and I took the first train to Berlin. I arrived just in time to change from my traveling suit into full dress, and drive post-haste to the Philharmonie, where the Langenbeck memorial was celebrated. This memorial celebration was held under the auspices of the "German Society for Surgery," whose founder and permanent president Langenbeck had been. The society was founded soon after the establishment of the German empire in 1871. Its object was to assemble the surgeons of Germany annually in the city of Berlin during Easter week in a congress for the oral exchange and communication of their experiences in practical surgery, and also to test the results and advances made in scientific and experimental surgical pathology, and to disprove or establish their validity by discussions.

After the deplored death of their president in September last the society determined to hold a "memorial" in honor of the deceased, and it was arranged to take place on the evening before the opening of the Congress. It was at first intended to be a banquet, but the death of Kaiser Wilhelm has put all public dinners out of question. The character of the memorial was entirely changed, and I believe that the change was decidedly a good one in the interest of the affair to be celebrated.

The largest hall in Berlin available for the purpose, the Philharmonie, was chosen. The imposing hall had changed its usual aspect. The stage was draped in black, with a beautiful forest of laurel and palm trees and other high-stemmed tropical leaf-plants in the background. In the middle of the

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stage stood the new and masterly bust of the honored surgeon. I recognized the amiable features of my master and teacher at the first glance. The whole scene was one of over-awing grandeur and solemnity. On the stage stood the members of the executive committee of the German Surgical Society — Esmarch, König, Thiersch, Bergmann, Trendelenburg, Schönborn, Küster, and some others. The large hall was filled, many having to stand. Every reputable physician in Berlin was present. The army was represented by its highest officers. Every one of the Imperial Cabinet ministers was present, and the medical corps of the army was numerously represented to do honor to its former teacher and surgeon-general. The Grand Duke of Baden and the Grand Duchess, brother-in-law and sister of the present emperor, occupied a private box. The surviving members of Langenbeck's family were also present. The most prominent Berlin daily makes the following comment:

"A more brilliant assembly than this one was never before seen within the large hall of the Philharmonie. The highest representatives of science and of art, the most honored names in the army, as well as the highest officers of state, sat together in an earnest, impressive memorial gathering with the pupils and friends of the immortal master in the guidance of the disease-curing steel."

The exercises began with the singing of Mendelssohn's Mourning Song by the chorus of the Royal High School, after which von Bergmann, the successor to von Langenbeck's chair of surgery in the university, stepped upon the rostrum and in elegant and poetic language delivered the memorial oration. He wore the full uniform of a surgeon-general, with all his decorations, a beautiful sight, though to an American it seems novel and unrepugnant. The speech made a deep impression on the audience. It was a detailed biographical sketch, replete with interesting observation on the progress of surgery during the past fifty years. The

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ceremonies were closed by another short chorus by Haydn. The whole ceremony lasted only one hour and forty minutes.

After the ceremony there was a gathering for lunch in the dining-room of the Hotel du Nord. Old acquaintance was here renewed, new friendships begun. There were about two hundred members present. The Executive Board had a short meeting. I presented some of my cards of introduction, and soon became thoroughly acquainted. The Germans have the very pleasant custom, when a foreign guest or member of the society is pointed out, of stepping up and introducing themselves with a bow, giving their names and mentioning their official positions. This custom is freely indulged in by the younger surgeons, and even the professors while at the Congress lay aside the reserve which so frequently isolates or at least excludes them from companionship with the younger element at home. As you will see by the inclosed programs for the sessions of the day, each one is simply called "Herr." Titles count for nothing, and neither does position; every man is equal on the debating floor, and stands or falls by what he says.

The mornings are devoted to demonstrations of cases, specimens and drawings, instruments, etc. These communications must be strictly oral. I have frequently seen the president call to order a member who attempted to read a long paper at the morning session. Any person who in the least wanders from the subject is immediately reproved by the chairman, and, if a speaker attempts to "ride a hobby"—to present a matter on which he has spoken or written before—the members are not slow to show signs of disapproval. Every minute of time is valuable to the Congress, and only new things are permissible as subjects for report or discussion. During a discussion following a demonstration of the condition of the bodies of old men who had hypertrophy of the prostate, the question as to the best methods of catheterism in these cases arising, some members gave their views, when

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Professor Socin, of Basel, informed them that such stuff was not wanted—that only facts relating to the question were of interest, and the recital of opinions valueless and out of order. Von Bergmann makes an excellent presiding officer. He has succeeded in controlling the program and the discussions in such a manner that volume XVII of the transactions will be the most valuable published up to date. I will give you a report of what I conceive to be the most interesting papers brought to the Congress. The morning sessions are held in the Royal Surgical Clinic, in von Bergmann's operating room. Four hundred and fifty seats are reserved for the members, and the space above is always crowded by guests, so that standing room only is the order of the day.

There are surgeons here from different parts of the world—from Japan, China, Australia, India, Russia, Italy, and Spain. For the first time since 1870 invitations have passed between the French and German Congresses, a fact which I am glad to chronicle. From the United States I am the only member present. Mr. Roswell Park, of Buffalo, was admitted to membership this session. Dr. George J. Engelmann has attended a few of our sessions as a guest. A number of young American students also attended regularly.

A new rule was adopted making a membership hereafter more difficult to obtain. The Congress has 100,000 marks, and it is the intention to erect a building to be known as the "Langenbeck Haus." It will cost 550,000 marks, and will be in the center of the city, near the Surgical Clinic. It will be used throughout the year by the Berlin Medical Society, and by our society during Easter week at our annual session. It will contain our library, reading-room, and laboratories, and will have a museum, open to members the year round.

An invitation from the American Surgical Society was read. I advised all who could to go over and attend, stating that there would be a higher grade of American surgeons (scientifically) present than were seen at the International. Es-

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march told me that he would be over with his son, and was endeavoring to have others join his party.

They have very little respect for the A. M. A. here. But I must close, as I am expected to dine with von Bergmann in half an hour.

A. C. BERNAYS.

CHLOROFORM VERSUS ETHER IN EUROPE—DEATH FROM THE LATTER IN HAMBURG.

HAMBURG, HOHENFELDE, May 5, 1888.

Editors St. Louis Medical and Surgical Journal:

I have seen a great deal of surgery, and am now waiting at this hospital (the Marien Krankenhaus) for the surgeon, Herr Kümmel, who is to perform laparotomy for ileus on a young Spanish sailor. His method is to open the abdomen from sternum to pubis, take out all the intestines, and repair the damage as best he can.

Kümmel is not the great surgeon here, but is nevertheless a man of considerable and deserved reputation. The greatest man here is Schede, and I have spent most of my time in his hospital. Dr. Sands, of New York, spent a month with Schede, and, being a partisan of ether as against chloroform, undertook to convert Schede by showing him how to use the former anesthetic.

The case was that of a woman of about 38, afflicted with uterine cancer. Sands, who, as you know, is recognized as one of our best surgeons, sent to London for an ether bag and all the apparatus necessary for the administration of the anesthetic, and also secured the purest and best ether. He and his son, Dr. Sands, Jr., began the administration in the presence of Schede and eight other prominent surgeons. In less than four minutes the patient was dead, so very dead that all means of revivification—artificial respiration, even tracheotomy and forced air—were of no avail. The post-mortem showed normal heart, lungs, and brain—in short,

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nothing abnormal or pathological but the cancer of the uterus. The French and Germans, as is known, have never taken kindly to ether, using it but very little. If this incident will keep them from using it at all in the future, they are to be congratulated. I can not understand how anybody who has ever used chloroform can become a convert to ether. It takes a good deal of prejudice to make even those who have been its advocates stick to it, and I am glad to say that all my experience and observation on this trip tend to show that it is gradually going out of use abroad. Chloroform is now administered throughout the world five times where ether is resorted to once. There have consequently been a few more deaths in the gross credited to chloroform within the past year over those attributable to ether, but, when the number of times each was used is taken into consideration, ether has been the more fatal. I think chloroform is dangerous only when there is grave organic disease of the heart, or in persons addicted to the use of whisky.

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A letter was also published, during this visit of my brother abroad, giving an account of his call on Dr. Morrell Mackenzie, at the Charlottenburger Schloss, Berlin, where this English surgeon was then in charge of the dying Emperor Frederick of Germany. I can not recall in which publication the article appeared and have no scrap-book clipping of it. As I remember the circumstances, my brother had a letter of introduction to Dr. Mackenzie. On sending this, together with his card, to the Englishman, he received an invitation and a pass to enter the castle, from which closely guarded abode the

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usual visitors were at the time excluded. It will be remembered that a bitter feud was on between the English throat specialist and his German colleagues. The criticism of the latter had been at first respectful and guarded, although they made no secret of their dissent from his diagnosis and disapproval of his treatment. When it was perceived that there was method in his madness in denying that cancer affected his royal patient, and that a designing feminine mind from personal and political motives inspired the pernicious expectant treatment, their indignant strictures grew vociferous. Much space was given in the dispatches and articles of the press throughout the world to this extraordinary doctors' dispute, so that the call my brother made on the emperor's English surgeon aroused considerable interest. He saw the royal patient lying asleep in the room adjoining the one in which Dr. Mackenzie received him, and the Empresses Frederick and Victoria (the latter on a visit to her stricken son-in-law and daughter) pacing up and down a gallery or balcony of the castle in earnest conversation. He always maintained that two women of less naturally imperious and imperial aspect than these exalted ladies could not have been selected among the daughters of Eve in all the wide world. When he left the castle after his visit he found a mob on the outside,

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who held him up bodily, questioning him excitedly on what he had observed within. A policeman had to extricate him from this demonstration, which amounted almost to an assault.

The first third of my brother's independent activity had now elapsed, and in spite of, or rather because of, the many enemies he had managed to make, his reputation was established. He was in the saddle. With a *gaieté de cœur* that was refreshing to watch, he went on his own triumphant way. When "friends" reported to him what Tom, Dick, and Harry were saying against him, he did not for the most part even take it seriously, but laughed, or made some curt, pungent remark that, if it went back to the prime offender, was sure to rankle—at least give him a bad quarter of an hour. He always insisted that his enemies had helped him much more than his friends. With Gladstone, he held that "censure and criticism never hurt anybody—if false, they can not hurt you unless you are wanting in character, and, if true, they show a man his weak points and warn him against failure and trouble." Let the weak whine about traducers and backbiters. A chance flick and sting at that ilk was all a strong man could find time or thought for. He experienced the exaltation of him who has in a supreme degree the power to stay suffering.

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Already the band of those he had brought back from the brink of the grave to jubilant health was assuming the proportions of a goodly legion. Already the young men to whom he began to lecture at the old College of Physicians and Surgeons, in 1883, felt the dawn of the new era of science, and were learning to assimilate into the texture of their thought the great truths of evolution, for Dr. Bernays was one of the first expounders in the West of this new and convincing explanation of the processes of nature, and he lost no opportunity to enlighten his breathlessly listening audiences.

In the *St. Louis Medical and Surgical Journal* of March, 1888, can be found this significant item: "During the past month Dr. A. C. Bernays performed a laparotomy for the extirpation of both ovaries in which he removed those organs and had the wound sutured in nine and a half minutes from the time the first incision was made." Later he exceeded that speed, and grimly smiled at those of the profession who "wore the cloak" of dignity, and who were obliged to hide their awkwardness, ignorance, and bungling by making their victims feel proud of having been for hours on the operating table for the same troubles it took him minutes to dispose of. "The reason I beat the Austrians,"

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said Napoleon, "is that they did not know the value of five minutes."

Five years later, in 1893, we find a number of publications, in the medical as well as the daily press, proclaiming the principles which for fifteen years Dr. Bernays had taught and lived. The *Kansas City Medical Index* for November, 1893, openly jeered at the hypocrisy of some of the St. Louis surgeons "who had for years spoken harshly of the brilliant A. C. Bernays because some of his really remarkable work had been mentioned by the public press." This journal charged that at a meeting of the Southwestern Railway Surgeons, held in October, 1893, in St. Louis, a few St. Louis surgeons monopolized the time of the visitors for the purpose of advertising themselves by "clinics" in which matter foreign to the purposes of the meeting was illustrated. "The very men did this," the article states, "who are denouncing Dr. Bernays with one breath and whispering advertisements to newspaper reporters with the next."

"At the clinics reporters were admitted," quoting further from the same article, "and column after column appeared in the daily press anent the 'wonderful' operations performed by these 'skilled surgeons.'" Another paragraph reads: "The

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fight made against Dr. Bernays has redounded to his good. Today he is better and more favorably known at home and abroad than any of his competitors, and his work is far greater than that of any two surgeons in the city of St. Louis. The reason of this lies in the fact that he has made the physicians of St. Louis understand that he will attend cases only when called by a doctor — the true position of the man who practices surgery as a specialty — and also that he is one of the most daring and skillful operators in the world, which even his enemies are forced to admit."

The last decade of the nineteenth century, except for the illness of the spring and summer of 1898, marked the zenith of my brother's power. Sometimes I saw him coming from an unusually difficult and successful operation preceded and followed by a troop of assistants, pupils, visiting medical men, who hung on his words and pressed about him, eager to serve him, jealous of the little favors or preferences he carelessly distributed, neglectful of merit perhaps, acting on the caprice of the moment. He always looked radiant, exultant, in the midst of these "heralds, pursuivants, and trumpeters," and loved their plaudits and their admiration. It is true that some of those he tried to instruct and inspire lacked the courage and the intellect to fol-

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low him in his ideal conception of his profession. A few were mere sycophants and ingrates; when profit lured elsewhere, they basely deserted him — turned against him. But impulsive, generous, slow to suspect, as he was, not until the shameful fact jumped into his very eyes would he be convinced of ingratitude or betrayal. The great majority of those who knew him at all well remained, however, friends of his to the end.

CHAPTER X

DR. BERNAYS' DARING

Had the great truths waited till the majority voted in their favor, they would never have been heard from.—*Hobbes*.

If you are persecuted by jealous rivals, cheer up! Men do not combine against insignificant foes or train parks of artillery against fleas.—*A. C. Bernays*.

The year 1890 once more saw the Doctor on his way to Europe. The International Congress of Physicians and Surgeons was to meet in Berlin, and he went this time invited to read a paper, and truly well-equipped with his "Gunshot Wounds of the Abdomen," a contribution to the surgery of the time that was destined to create considerable interest. He was much congratulated on it in Berlin. The leading medical journals of the world asked for copies of this paper, and it was translated into several languages. Its author took an important part in the discussion on various topics before the Congress, and was elected secretary of the surgical section.

From a vivacious letter of his describing the



**DR. BERNAYS AT THE TIME HE BECAME PROFESSOR AT THE
ST. LOUIS COLLEGE OF PHYSICIANS AND SURGEONS.**



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sessions of the Congress, that was published in the *St. Louis Republic*, August 27, 1890, I quote some paragraphs. Nearly all the great men mentioned in the letter are now dead. It reads like a page from a diary, torn out and blown by some careless breeze across the two decades that have elapsed since its writing—a sorrowful page now, in spite of the hearty enjoyment of life it breathes:

THE WORLD'S SAVANTS.

It was undoubtedly the largest and most important gathering of medical men ever held in the world. Six thousand members were registered, besides several hundred so-called participants and fourteen hundred ladies. Germans were, of course, by far in the majority, the meeting being in their own country. Americans were next in strength, numbering 700. Then came 550 representatives of France and 400 British physicians. All countries on the face of the globe were represented by their best men. Among the out-of-the-way nations represented were the various African colonies, East Indies, China, and Japan. All had come to contribute the work of their best men, and to learn from the scientists of other nations the result of their discoveries in the many fields of medical science.

There were over nine hundred papers on the program to be read, and, although the sessions were governed by strict rules, not over five hundred were read, as time would not permit. The rules limited each reader to twenty minutes. In discussions, ten minutes were the limit. In the surgical section I was elected secretary to represent the Americans, and I obtained for all Americans who applied to me an opportunity to read their papers. The rule prohibiting the publication

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of anything as a part of the transactions which was not actually read in the session was strictly enforced. In the surgical section by far the largest percentage of the papers announced were read by Americans. All but a single paper presented in that department was read. That one was omitted because its author was not present when his name was called. A rule which met with general approval was the one electing one honorary president from each nation, or rather from each of the larger and more civilized countries. Thus there were nine sessions in the surgical section, each one governed by a different president. In the session over which Sir Joseph Lister presided, Dr. Senn and I had the honor of reading papers on gunshot wounds of the abdomen. Dr. Charles T. Parkes also presided at one of the sessions of that section, representing the United States. A remarkable thing at the Congress was the enthusiastic applause which greeted every effort on the part of a Frenchman. Even in the general sessions the French representatives were always loudly cheered. Professor von Bergmann, who is known to have close personal relations to the Emperor, William II., actually delivered a speech, one of the most important of the Congress, on the "Aseptic Treatment of Wounds," in the French language. This semi-official tender of a renewal of amicable relations with France may be considered rather significant, even from a political point of view.

THE CONGRESS OPENED BY VIRCHOW.

The first and most important session of the Congress was opened by the great Virchow. It assembled in the circus building, an amphitheater which comfortably seats 6,500 people. The entrances to this building and to the theater proper were decorated in the finest and most elaborate style, after plans and designs drawn by various renowned German artists. Magnificent statues of heroic size—copies of masterpieces of ancient art—were artistically arranged about the hall, the

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two largest and most conspicuous being casts of the classic statues of Æsculapius and Mercury. The ceiling of the round hall was beautifully draped with flags of different nations.

Virchow stated in my hearing that never before had there been congregated in one place on this planet as many truly great and celebrated medical men as were present on this occasion. After the opening ceremonies, which consisted of speeches of welcome and greetings from the representatives, Joseph Lister opened the scientific work by a lecture on "The Present Condition of Antiseptic Surgery." Lister is a man of medium size and regular proportions, with finely cut features and a calm and pleasant facial expression. His silvery white hair, which extends over the lower part of his face in the shape of well-kept burnsides, his clear but not loud voice, and his way of using his eye-glasses, together with his unassuming phraseology, confirmed the well-founded, if preconceived, respect for him in the minds of thousands of physicians who heard and saw him for the first time. The candor with which he confessed his errors (he said, "I am ashamed of ever having introduced it," referring to the carbolic acid spray), and the very evident desire on his part to avoid making new mistakes, his reserved and conservative judgments, and his admissions in favor of asepticism, created for him the most complete confidence, amounting indeed to reverence on the part of his hearers. Throughout the Congress, wherever he appeared, he was the recipient of ovations from his colleagues, an honor and a distinction which only Virchow and Koch shared with him.

KOCH ON BACTERIOLOGY.

After Lister's speech the great Robert Koch read a most valuable paper on "Bacteriology, Its Methods and Practical Results." He expressed his conviction that physicians would ultimately learn how to successfully combat tuberculosis (consumption) even in man. He stated that he had found a

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method of treatment which would make certain animals (the guinea pig) perfectly safe from that disease, and would completely check its progress even after the disease had seriously affected the body. He thinks that we may ere long expect the same for man.

Perhaps the most lasting impression by any one paper was made by that of Thiry, of Brussels, on "The Hygienic and Moral Dangers of Prostitution to the Health of the People." He made a strong plea for a joint effort on the part of all cultured nations to take this matter in hand and to regulate it. By most accurate observations he showed how the population was being decimated by certain diseases, which can be prevented if the vice of prostitution (which, no matter how much we deplore it, does exist and will exist under the Christian marital law) is properly controlled and regulated by law.

The festivities were begun by an evening lawn party for the members and their ladies, given at the Art Exhibition Hall and Park. This magnificent place was chartered by the Congress for the entire week. Seventeen sections of the Congress held their working sessions in the beautiful halls of the art gallery, where the finest productions of modern painters and sculptors were on exhibition. Blackboards and demonstrating tables had been arranged in each one of the halls, and also a rostrum and seats for the members. The park surrounding the Crystal Palace, as well as the halls within, were magnificently illuminated. Six immense military bands and two string orchestras were distributed in the park in such a way as to keep up continual playing. A fine lunch and good clarets and Rhine wines, as well as the best of "Münchner Bier," were freely distributed from a dozen buffets. In the crowd of 5,000 were Sir James Paget and daughters, Peau and two daughters, Lawson Tait, Sir Joseph Lister, Sir William McCormack, Virchow, von Bergmann, Dr. Albert Gihon, Dr. Hamilton, Jonathan Hutchinson, Mr.

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Benjamin Hart, Dr. Henry Penwick, Bardeleben, Dr. Karl Theodor, Duke of Bavaria, Victor Horsley, and of course the German celebrities in full force.

DR. BERNAYS' WORK.

Before the Congress met, Dr. George W. Cale, who accompanied me on the entire trip, and I made a tour of the hospitals of Europe. I paid particular attention to the lines of work of which I have made a specialty for years — diseases of the stomach and abdominal tumors principally — but I also became especially interested in the treatment of the surgical diseases of the kidneys and the bladder, troubles of the aged, a line of work that has been cultivated with great success in Germany and England. I purchased some apparatus and quite a number of instruments recently invented.

One afternoon at 5 o'clock a number of the Berlin professors gave dinner parties, to each of which from fifteen to thirty foreign guests were invited. After dinner we drove to the Central Hotel, where a meeting of Americans had been called to take some action in regard to the invitation which had come from Chicago for the eleventh Congress. We would undoubtedly have succeeded in getting the Congress for Chicago in 1893 had it not been for Surgeon Hamilton, who, in a very logical speech, summed up the arguments pro and contra, and the project was voted down by a large majority of the Americans present. That put an end to Chicago ambition, much to the chagrin of Dr. Liston Montgomery, who was the bearer of the invitation. It is better thus, because, in order to equal the Berlin Congress in Chicago, an expenditure of at least \$200,000 would have been necessary, and there was no guarantee that the money would be forthcoming.

ENTERTAINED BY THE CITY.

The greatest fête of the week took place at the City Hall, where the members were entertained by the city of Berlin.

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Americans are the most hospitable people on earth, and can entertain as liberally as any one, but we all agreed that an entertainment such as the one at the Rathhaus was never before witnessed. The beautiful building, a masterwork of architecture, the decorations, the music, the profusion of good things for the inner man, together with the consciousness each one had of being in the company of the greatest number of distinguished workers ever before assembled upon earth, created an enthusiasm which simply beggars description. Some of the men, in their ecstasy, carried Virchow through the hall on their shoulders. Lister and von Bergmann, and Bardeleben and Koch were cheered to the echo as they left the hall. Many a "Katzenjammer" was the result of this exuberance of conviviality, but, be it said to the credit of the doctors, no gross excesses were committed and all the soreheads got well, with the exception of a few chronic cases, which are among the most malignant and incurable, as well as offensive, ailments that come to our notice. The Americans, with two or three exceptions, had only the acute form of the disease, and then but in a mild shape.

On Wednesday, after the day's work, the dinners of the different sections took place. They were all very fine affairs, but by general consent it was admitted that the dinner given by the German Society of Surgery to the members of the surgical section was the most elaborate and the most elegantly conducted. It occurred at the beautiful winter garden of the Central Hotel, von Bergmann presiding. The toasts were answered by von Bergmann, Bardeleben, and Le Fort. Trendelenburg toasted "The Four Honorary Members of the German Society of Surgery" (Lister, Paget, Billroth, Ollier). His Royal Highness, Dr. Karl Theodor of Bavaria, spoke in honor of von Bergmann. Sir Joseph Lister toasted old Thiersch, and Thiersch in turn drank the health of Sir James Paget, who answered with some appropriate remarks. Robert F. Weir, of New York, spoke on behalf of the Americans, and

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an Italian gave thanks for the honor conferred on his country, which will entertain the Congress in Rome in 1893. This was undoubtedly the greatest surgical dinner ever given. Scarcely a name well known to surgeons in any country on the globe was missing from the list of participants.

Soon after his return from this trip the Doctor severed his relations with the College of Physicians and Surgeons, and accepted a professorship in the Marion Sims College. About the same time we removed from North St. Louis to Laclede avenue, just west of Grand avenue, where we were still living when the Doctor died sixteen years later. The location was very convenient to the Marion Sims College and the Rebekah Hospital — for several years the scene of the Doctor's main operations.

I find among my clippings of the year 1893 a greatly increased reference to the Doctor's daring. Indeed his audacity is dwelt upon fully as much as his skill and his good results. It is a curious fact that even now people remember him chiefly for his daring — his admirers with approbation, and that part of the public that takes its cue from his enemies or from old fogysm with a distinctly condemnatory emphasis on the word. It is, however, perfectly obvious to those who have the gift of observation that what for one man would be reckless license and unwarranted boldness is for another only a legiti-

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mate action — a duty his special talents force upon him. In truth, the daring of one generation is frequently the commonplace occupation of the next. Quite intuitively the worship of the world is, therefore, to him who dares. Inasmuch as every Tom, Dick, and Harry in the medical profession now opens the abdominal cavity, and no one — whether the result is good, bad, or indifferent — criticises him for daring, it is truly depressing to review the beginning of my brother's career and to realize what mountains of prejudice he had to overcome.

By the end of 1893 he had done about a thousand laparotomies with magnificent success, and, though his methods were still stigmatized as daring, in the eyes of the fair-minded and well-posted on surgery he had won the day. This is the way W. M. Reedy, in the "Character Photograph" he wrote for the *Mirror* at about this period of my brother's activity, expresses the feeling of the time with regard to Dr. Bernays:

Dr. Bernays is a surgeon, so much of a surgeon that a local wit has said that if a man went to Bernays with a bad corn, the first thing the surgeon would suggest would be an amputation at the knee; or if one called on him with a case of catarrh, the remedy would be a new nose. There is just enough truth in this bit of badinage to give a clew to the reasons for his success. It expresses the idea that he does not hesitate to decide upon the remedy at once, though the

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remedy be of the desperate order. It is his celerity of determination upon an operation, and the celerity and deftness of its performance, that furnishes the key to his marvelous success. He experiences a joy in the performance of a difficult surgical feat that would give one some idea of what a frenzy possessed the performer of the crude surgery of the White-chapel district. They tell a story of his humming the "Gaudeamus Igitur" while performing a most difficult operation. A man who can thus enjoy pleasant recollections of old Heidelberg while holding another's life in his hand has certainly a self-possession far above the ordinary. It is uncanny to look at, but how much more uncanny it would be to behold a surgeon trembling and fumbling over a person to be operated on. It is the sure touch that tells—the confidence that perhaps renders his subjects less difficult of manipulation.

Exactly! and on more than one occasion, when the solemn, dignified, perhaps prayerful, brother in the profession fumbled over a difficult operation, the man who hummed "Gaudeamus Igitur" as he stitched up a wound, happy to have helped a suffering brother or sister, was welcomed like a rescuing angel if perchance he appeared before the victim of the nonelect to surgery had bled to death. It is a subject of general knowledge that more than once, when some rash would-be surgeon stood, at his wits' end, over a patient about to die on the operating table, he was extricated from his ghastly position by a pitying nurse, who stole out of the room and hailed my brother to save a life.

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Daring! There are some stories current about him that could indeed be described by no other word. They tell, for instance, of a feat of his when he was on his way home from the East, either from Saratoga or more likely from a European trip. It must have been quite early in his career — as long ago as the eighties. He rarely traveled abroad without surgical instruments, but on this occasion he had none of his outfit with him. In the dead of night a train attendant, who knew him by sight and reputation, summoned him from his berth, saying that in the adjoining car a passenger was groaning in such terrible agony that he was keeping everybody awake. The Doctor found the man afflicted with a hernia that had suddenly become strangulated. Without hesitation, seeing the inaccessibility of other relief and the man's terrible suffering, he took out his pocket-knife and then and there divided the constriction. The physician who told me of this incident quietly commented on it, "You see he was a man so fertile in resource and so absolutely sure of himself that he could dare do this."

In and out of the profession people were aghast and agape when in 1894 he operated on his own sister, Mrs. Wislocki. Some envied him his astounding sang-froid — like young Eastman, a fellow-stu-

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dent of Dr. Bartlett in Berlin, who, commenting on this occurrence, said, "he would give much to know Dr. Bernays, because he had more self-confidence than any one else he had ever heard of." It happened this way. Lily, after the loss of her second husband, was living in San José, California, with her three children. From her reports and those of her physician, August surmised the nature of her trouble. A congress of medical men was to take place at San Francisco about that time, and quite a contingent of these went on the same train we took to go West. Dr. Eastman, of Indianapolis, who was to be at the Congress, had been engaged to operate on Lily in case surgical interference should be found necessary. After seeing her, August decided that he would take her at once to San Francisco, where Dr. Eastman would have in the meantime arrived. He intended to remain in attendance on her at the hospital until she was well, while I stayed in San José with her children. On learning that Dr. Eastman was detained in Indianapolis, and had given up his western trip, he prepared her for the operation and operated on her himself. He found what he expected to find, and a dangerous and difficult case it was. He told me afterward that when he realized that Dr. Eastman had disappointed him, he reviewed the whole array

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of surgeons there assembled, and, feeling sure that there was not one among them who could operate approximately as well as he, or had half his experience, he concluded it was his duty to do it himself. "I knew," he said, "that as soon as I got to work I should forget my feelings, forget that the patient was my sister, and be intent on and wholly absorbed in the task before me. And that is exactly what happened."

These words of his own explain how he could hum students' songs while doing what — however grewsome it might look to others — to him had become a gratifying habit, in which automatically all the energies, except those he needed, were for the moment submerged. To the always self-conscious, to the wholly self-centered, such concentration, such temporary extinction of that part of self which would be a hindrance in action, looks uncanny. They find for it such absurd phrases as "tempting Providence." It is a state of mind akin to the abstraction which poets and prophets know under the name of inspiration. The reaction — often great — is felt afterward.

The Doctor's thoughts, when at work, were so divorced from all that did not have to do with it that he almost habitually left his diamond ring where he had put it down before making his hands

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thoroughly aseptic, and had to depend on its restoration by some attentive nurse or assistant. The fee, too, was deposited on a table or stand near by and promptly forgotten. The assistants chaffed him about these nonchalant habits until at one time he made the standing offer that whoever could capture and pocket the fee after he had actually left the house might keep it. Once he got as far as the gate, I am told, but something at the back of his head — perhaps the attention of the young men concentrating itself on the pelf — seemed to warn him before he passed out, so that no one else after all got the money.

Dr. Bernays describes in his "Golden Rules of Surgery" an operation for stricture of the esophagus which he did on a child $6\frac{1}{2}$ years of age, in 1895, as the one which required more courage on his part than any other in his entire career. He says, in noting the steps of the first preparatory operation in this case, "I shudder even today at the fearful chances I took to save a life," and he tells of a Harvard professor named Warren who cited this operation to a class of medical students as "among the most daring ever undertaken." He accepted the terrible risk because this child of $6\frac{1}{2}$ years weighed only nineteen pounds when he first saw her, having been fed for four years through an

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artificial fistula leading into the stomach. "She was," he continues, "evidently growing weaker all the time. The mucous membrane of the stomach was, no doubt, partially cauterized away, and the fistula was leaking constantly and was not working satisfactorily. Death would surely have ensued had the condition not been remedied." In a short time after the second operation, which reestablished the natural passage through the esophagus into the stomach, the child weighed forty-two pounds, and, though obliged to use bougies to keep the esophagus from closing again, grew up to be a healthy girl. In concluding his description of this remarkable case, that had so amazing and hideous a sequel in the courts — of which hereafter — my brother says:

I have often been asked by students and physicians what operation during my long experience I considered as the greatest and the one requiring most "nerve." I always answer that a surgeon who operates on his nerve is a dangerous man and not well qualified. The quality called "nerve" by Americans and English should not be required — in fact, is not a valuable asset in a well-educated surgeon. Let us remember, however, that it takes a lot of nerve even to puncture the pleural cavity, or to make an abdominal puncture, or do a tapping operation in a case of dropsy, if the surgeon has not the anatomical and physiological training. Nerve is valuable to a surgeon if it means courage to do his duty, which he has recognized after exhausting all scientific methods of diagnosis

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and after his judgment says, "Take the risk, because it seems likely to prolong or save life, or to palliate otherwise fatal disease."

When one considers the amount of heroism required by men who thus bear the banner of scientific progress into new territory without counting the fearful cost to their nerves, it is no great wonder their hearts give out at fifty-two. Working amidst suffering, under difficulties, facing danger all the days of the long years, and lying awake many hours of the night devising the steps of tomorrow's cases, or reviewing in memory those of today, wondering whether the fraction of a chance has been missed, the minimum of a possible advantage overlooked, how can they long resist such a strain? Even while engaged in the struggle to stay the suffering, to prolong the years for their patients, to promote the science they are trying to serve, they are obliged constantly to defend their own character and reputation against the attacks of captious and envious rivals in their own ranks. This happened to my brother for the last time in January, 1898. On that occasion he gave his decriers a public lesson so forcible and telling that for the balance of his career he was not again molested in this particular way. The rebuke he administered through the columns of the *Republic* explains the situation

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so well that I need not go into it further than to reprint his words. The article is as follows:

DR. BERNAYS ANSWERS HIS MEDICAL CRITICS — THE SURGEON DEFENDS HIS OPERATION OF REMOVING A MAN'S STOMACH.

Dr. A. C. Bernays gives the following statement to the *Republic* in reply to criticisms made by medical men anent his recent operation in removing a man's stomach:

In your issue of yesterday you published a report of an operation which I performed in a case of cancer of the stomach. The operation was given much prominence in the press because it followed closely on a similar one performed recently in Switzerland. The European operation resulted in prolonging the life of a woman, while my operation proved fatal. The Swiss operation was the first successful one in which the whole of the stomach was removed from a human being. My case was not the first one in which this operation had been unsuccessful, but it seems to have been the first operation of this character in America. I am of the opinion that the operation of total excision of the stomach for cancerous disease will become a perfectly recognized and successful part of surgical practice. I predict that the successful operation of Schlatter will soon be followed by many others, both in Europe and in this country. I shall certainly perform it again, and I am confident of success in a suitable case.

When I began practice in St. Louis twenty years ago I was told by Dr. Hodgen, who was then the busiest practitioner in this city, that abdominal operations were not justifiable in his opinion, and he added that he had done sixteen operations for abdominal tumors and that he had fifteen tombstones to mark their results. Dr. Hodgen was a good physician and an excellent operator. Notwithstanding this statement, which he frequently repeated, many surgeons, I among them, have since then operated on thousands of cases of abdominal tumors

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with very satisfactory results. I may be permitted to say that I did the first successful operation in this city in a case of cancer of the womb, removing the whole of the organ. I also removed gall stones, and have operated in cases of perforating gunshot wounds of the stomach and intestines.

There was a time when these operations were described as being dangerous experiments on human beings; they were called "daring and unwarrantable." They were condemned by members of the medical profession.

The general practitioner or family physician is the one who is usually called on by his patient for advice in selecting a surgeon to perform a difficult operation. It is a general practitioner's business to keep himself posted about the scientific qualifications and also about the technical skill of the surgeons who practice in his city. The greatest compliment which can be paid to a surgeon is to be called in by a physician to perform a dangerous and difficult operation, whereas to be called to operate by a layman carries with it but little honor and is often very unsatisfactory in its results. My greatest happiness consists in doing a successful operation and receiving the praises of my medical confrères for my work.

In yesterday's *Republic* five physicians were interviewed, and all expressed themselves in more or less polite language as opposed to the operation of gastrotomy. None of them have ever performed the operation, none of them have ever seen it performed, but they are willing to rush into print and give their opinions to the public, condemning the operation. Their criticisms are made in such words as to let the public feel that they are tender-hearted, conservative, and would not harm a fly. In other words, their play is to the gallery. The dress circle and the parquet are not addressed at all by some of the actors.

My work is for the profession only. The members of the medical profession are the only persons competent to judge of the work of a surgeon, and only when they have seen his

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work and watched his results carefully can they pass judgment on him. I do not care for approval of my surgical work from the public, and I never operate upon a case unless it is referred to me by a physician or a surgeon. My reasons for this plan of practicing are good ones, and any thinking person can see that the best results can be achieved in any line by selecting expert workmen. The selection of a surgeon must be done by a competent judge, and, therefore, of necessity by a medical man.

I shall continue to practice surgery for the profession as I have been doing for some years past, with a full measure of financial success as well as spiritual satisfaction. In this way my artistic sense, my scientific feeling, and my professional aspirations can best be subserved. The applause of the masses has no charm for me. I prefer the approval of my colleagues, which comes as a result of their trained and educated judgment in surgical matters.

There are about 1,500 medical men in this city and about 75,000 doctors in the country who naturally look to St. Louis for their experts and specialists in surgery. It is from them that I receive my work and my reward. The carping criticisms of rivals adds a little spice to my daily bread. I hope my competitors will continue to woo that many-headed and fickle goddess, the public. May they continue to capture public favor by their vulgar play to the gallery. I have cast my lot with the cultured and refined members of the profession.

He carried out his intention as indicated in this letter, and performed a number of total and subtotal gastrectomies, some of them with excellent results. When I asked several of his former assistants how his subsequent patients who had undergone this most radical of surgical interferences

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had fared, "He has quite a number of stomach excisions running about alive," they assured me in their quaint medical jargon. In corroboration of their statement, one of his "live stomach excisions" soon after my inquiry introduced herself to me when I was giving up the old house on Laclede avenue in May, 1909. A little old lady presented herself there one day, and sent up word she wished to see me about some rugs I was disposing of. She was in the hall, and as I came down the stairs advanced toward me, saying, "Don't you know me, Miss Bernays?" She was a perfectly hale woman about 60 years old, whom assuredly I had never seen before, nor did I remember to have heard her name. Astonished and somewhat offended not to be recognized, she burst out, "Why, I am the lady whose stomach your brother took out nine years ago. And he lectured about me — I heard him — with my stomach there in a big glass jar." On my solicitously inquiring as to her present health, she assured me that she was perfectly well, and ate three meals a day without qualm or pain of any kind. She certainly appeared wonderfully spry for a woman who had had twelve children, not to mention the loss of her stomach.

To remove all or part of the stomach is not, of course, as easy as to do appendectomy, and the

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operation must always remain confined to great surgeons in the fullness of their mental and physical vigor, to men who have made a long and laborious study of the most difficult and trying cases of ulcers, growths, and cancers of the stomach. My brother had done this, and as early as 1887 invented operative means for the relief of the terrible suffering from cancerous growths in that organ.

In his "Golden Rules of Surgery" Dr. Bernays says, by way of summing up his experience, that progress in the saving of human life from this terrible scourge of cancer of the stomach must come through early recognition of the symptoms by the scientific pathologist and diagnostician, who will hereafter call in the operator, it is hoped, before the disease has made such inroads as to necessitate the desperate total gastrectomy.

CHAPTER XI

DR. BERNAYS' VIEWS ON FEES

I hold a good surgeon to be in the front rank of public benefactors — where they put rich brewers, bankers, and speculative manufacturers now.—*G. Meredith in "Beauchamp's Career."*

The degree of estimation in which any profession is held becomes the standard of the estimation in which the professors hold themselves.—*Burke.*

When by habit a man cometh to have a bargaining soul, its wings are cut, so that he can never soar.—*Lord Halifax.*

The human frame's to thee a Gordian knot.

Thou'll not untie it, but will straightway cut

And solve the riddle with Alexander's pschutt.

Hail, laparotomist! Thou'rt Johnny on the spot!

Thy fees would Cræsus break in two — that's what!

Millionaire murderer's money now doth glut

Thy purse until thou scarce can make it shut.

O thou and the lawyers! What a snap ye've got!

I honor thee for all the lives thou'st won,

Because thou'st often snatched a prize from Death.

I'd rather trust thy skill than preacher's prayers,

Were I sore wounded, by disease undone,

And, shouldst thou fail, would say with latest breath,

Thou art the friendliest Indian underneath the sun.

—*Sophistocles.*

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Under the name of Sophistocles, W. M. Reedy, in the above sonnet, from a series he was at that time publishing, happily satirized the opinion of the vulgar regarding Dr. Bernays' precipitation with the knife and his exaggerated demands on the purses of his patients. Of these accusations I shall have a word to say hereafter, because they were seriously made by some of his enemies and often used to his detriment.

But first the story of the millionaire murderer. Arthur Duestrow was the son of German parents of the Southside, and the father had by sheer blind luck become extremely wealthy. Old Duestrow in the early eighties, it seems, bought Granite Mountain shares in large blocks, paying but a trifling amount for the share. As is well known, this stock afterward rose to about \$70, and for a time paid enormous dividends. The parents of Duestrow died, leaving a large fortune to their married son Arthur and his sister. Young Duestrow, unprincipled and unrestrained, soon began to make the worst possible use of his wealth. After a debauch he returned home one morning, frenzied by drink, seized his only child, a little boy of three, and, pinioning him to the wall with his hands, shot him through the breast, instantly killing him. Then he discharged the three shots remaining in his re-

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volver at the head of his unfortunate wife as she ran to the rescue of her little son. Dr. Bernays was called to attend the horribly mutilated woman, and arrived at her bedside about an hour after the enacting of the grewsome scene. By a delicate and desperate operation he managed to extract two of the bullets and a part of the third, as well as seventy pieces of the bone of the fractured skull. He is said on this occasion to have intrenched further on sacred ground than had ever been done before. But though, with his accustomed optimism, he hoped, in the face of the terrible odds against her, to save the poor woman, he succeeded only in prolonging her life for five or six days. The murderer was apprehended, and the usual efforts of the lawyers on the usual plea of insanity began as soon as he was brought to trial. The lurid case figured in the public prints for several years until the execution of the wretched creature gave the final touch of ghastliness to the hideous story.

My brother, with his accustomed perspicacity, saw a unique opportunity to raise the standard of values hitherto current in his profession. He knew that on the part of the lawyers there would be no hesitation in demanding immense sums for trying to save the life of the criminal. Why should a surgeon, whose skill and reputation were unquestioned

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by his peers all over the world, knowing he had done superlative work in his effort to save the life of the innocent victim, allow his service, and therewith that of the whole medical profession, to be underestimated in the usual way? Dr. Bernays did not see why. Heirs there were none, excepting a sister of simple tastes, who was amply provided for. He, therefore, brought in a bill of \$15,800 for his services and those of his assistants. This was promptly disputed by the trustees of the estate as excessive, and a suit was brought, which my brother had the full intention of carrying, if necessary, to the court of highest jurisdiction, "in order," he says in an interview with a New York paper, "to get a ruling from the court of last resort that would settle for all time the question as to whether the surgeon or physician is or is not the sole judge of his professional services, subject, of course, to the approval of disinterested expert testimony."

The Bernays versus Duestrow case, side by side with the Arthur Duestrow trial, dragged on for several years, and caused a great deal of comment in and outside of St. Louis. In fact, on a recent visit to England I was told that my brother was in this instance supposed to have been the recipient of the largest fee ever accorded a surgeon—£5,000. As a matter of fact, \$5,000 was all he finally received.

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Whether he was persuaded by his attorney to compromise for that sum; whether he had anticipated the receipt of this money by a purchase of a longer string of horses than he could, without collecting this large fee, afford; whether he became convinced that the Duestrow millions had never existed in fact, or had dwindled to very modest proportions, he at any rate reduced his bill to \$5,000, the justice of which claim was not disputed and promptly paid.

It is a curious fact that in practical America so great a confusion of opinion and feeling regarding fees to medical men should exist. One reason for this condition undoubtedly is the lack of solidarity between the doctors — the envy and jealousy which causes some of them to bite off their own noses to spite their faces. Too many practitioners, because of personal feeling, still follow the myopic policy of belittling the achievement of a confrère and of begrudging him a commensurate fee when called to give expert testimony. Such foolish and near-sighted action on the part of many of them can be depended on with certainty, and is counted on by those who are anxious enough to obtain the best medical and surgical advice when they stand in need of it, but unwilling to properly remunerate it afterward.

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With some conspicuous exceptions, it is true that the readiness to adequately remunerate the medical adviser stands in inverse ratio to the wealth of the person seeking relief from a doctor. The late Dr. Pollack, of St. Louis, used to say that when a woman much bedecked and pretentious in her demeanor entered his office, he was almost certain of having to render gratuitous service; if, by her appearance, the patient indicated easy circumstances, he had some hopes; but if she came modestly and neatly attired in calico, he was sure of his fee.

Everybody knows that the medical profession is the only one obliged to do an enormous proportion of its work for charity. It is done uncomplainingly and as a matter of course by most medical men. From the very nature and the exigency of the service required — relief to the suffering — it is impossible for him who possesses the equipment to refuse to render assistance. He can not, except sporadically, ascertain the circumstances of those requiring his time, his strength, his skill. In innumerable instances, therefore, his good nature is imposed upon. His work is made to go unremunerated or so ill paid as almost to amount to a gift, and this in cases where people are amply able to requite properly. Of the really poor, who depend upon the physician not only for medical advice, but who are

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besides often beneficiaries of his charity by gifts of money and money's worth, I do not here speak, but of those who make a poor mouth or beat down and "dock" the doctor's bill because they know he needs the money, and, rather than enter into a dispute and have the payment deferred, will accept a lesser sum — of those who will basely take advantage of the practitioner's loathing of the discussion of the financial part of the transaction. There are some impudent enough even to ask that the "advertisement" the doctor gets from being employed by people of such importance as money-bags often conceive themselves to be, should figure as an appreciable amount to be deducted from the bill.

One sometimes hears the assertion made that a physician should have a like fee for all, regardless of the financial position of his patients. I believe that some so-called judges have so ruled from the bench, without perceiving the manifest absurdity of such an opinion. No two cases are alike. The nature and value of the service can be judged only by medical men — often only by him who renders it. The qualification and reputation of the physician or surgeon employed must be taken into account; the value of the life and health of the patient as well. But the very man who will insure his life for a million and cheerfully pay the insurance companies

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thousands each year, showing what commercial value he puts on it, will often haggle over the payment of a physician's hard-earned bill. He will insist on having the highest authority when alarmed — having him at his own convenience and bidding; but when the account is presented he has forgotten the urgency of his need, and will depreciate the services rendered, and cry out over the enormity of the demand and the rapacity of the savior of his health and life.

Few physicians care to impinge on their already sufficiently jeopardized nerve force so as to allow themselves to be drawn into the courts because of such disputes, nor can they spare the time it takes to be involved in litigation. Most of them are so absorbed in the scientific side of their calling that they can not give thought to the outward exaltation of their profession. Of course, the satisfaction derived from good results obtained by their skill is and ever will be their greatest recompense. There can be no greater joy to one who appreciates life in health than to have recognized the source of evil devastating an organism, to have devised means of routing the enemy, to have restored impaired functions to the pristine wholeness. Neither is the gratitude of the convalescent, the pleasure in his daily growing strength and returning appreciation

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of the joy of life, a mean reward to the doctor. In the case of the destitute this spiritual remuneration is all of which a physician ever dreams. But it will neither buy bread and butter, nor has it as yet secured the place the profession desires—"in the front rank, where they put rich bankers, brewers, and speculative manufacturers now." So that the thinking surgeon or physician is sure — when some immensely rich man disputes the justice of his claim — to bitterly note that men who scheme to get the better of others, who transmute into gold for their greed the necessities of the poor, who are at best but distributors, may lord it under our present system over the very brains who keep them in condition.

In a country such as ours, where money is the only criterion of power and attainment, it is necessary to educate the public mind to a recognition of the right to this emolument on the part of the profession, whose energies are spent in the preservation of the very basis of existence. A great surgeon, the world knows, is born — not made. The brains and the nerves in his makeup are of infinitely finer quality than those possessed by the mass of the human race. It takes a surgeon none the less years of intense application to train his inborn faculties, and it takes ever afterward, in the exercise of his skill, such devotion and such self-sacrifice as money has not the

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power to pay for. But in spite of the spiritual reward that is his, the honor that is due should not be withheld. Popular opinion should force the mere money gatherer to adequately pay the great surgeon or physician whom he has employed, taking into account that the evanescent energy of such a man is the rarest and most valuable substance to be found on earth.

Compensation on a sliding scale — i. e., proportionately higher as the human energies involved in the work accomplished are rarer, subtler, more exquisitely trained — is an economic principle as yet but imperfectly recognized, but sure to be established by future generations. My brother was here again pioneer and forerunner, breaking his lance in the Duestrow case gallantly and fearlessly, though prematurely, for an idea that in a less barbaric age and land will be a commonplace.

As usual, only a small proportion of his colleagues in the home city understood. A number of them used what they called his "exorbitant charge" in the Duestrow case to injure him. His superiority as diagnostician, as operator, was now no longer denied; so the bugbear of his charges came as a handy blade with which to stab from convenient ambush. To be sure, the patients thus sidetracked were the real sufferers. Animosity was, after all, futile as

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directed against him, for his time and strength were fully taxed by the cases which were sent him from adjoining and distant states, as well as by that nobler and more intelligent part of the profession at home that did not allow petty spites and sordid motives to influence its actions.

As a matter of fact, far from being exorbitant in his demands, he was always most considerate of the circumstances of his patients. During the early part of his practice he was so frequently deceived and taken advantage of by those who made a poor mouth that during the last fifteen years of his life he would have hardly anything to do with the financial end of his calling, keeping a secretary to attend to business matters.

His charity was never-ending, and done in silence and secrecy. Of his myriad benefactions I have heard mainly through others, such as assistants and nurses at the hospitals. These are authority for the statement that countless times he not only operated on poor patients gratuitously, but paid their hospital expenses out of his own pocket.

A dear old friend of his, Dr. Hugo Rothstein, recently told me with much emotion of an instance of my brother's very great generosity. It was in the eighties, Dr. Rothstein said, when he was in the habit of coming from Waterloo, where he then lived,

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to St. Louis to bring patients to my brother for operation. On one occasion he was invited by Dr. Bernays to go with him to see a case he was just about to visit for the first time. The patient had been treated without success by two prominent doctors of the city. On examination my brother and he found the young man to be afflicted with a stricture of the ileum. The mother of the young fellow, on being told by my brother that her son could be made entirely well by an operation, but that he must be at once removed to a hospital and well cared for by a trained nurse, burst into tears and said that what little money she had possessed was spent in the medical treatment her son had previously received, and that if his recovery depended on further outlay on her part, he must die. At this my brother took out of his pocket \$200, which he laid on the table, directing the woman to provide at once whatever was necessary. The young man was operated on and recovered completely.

In some instances the Doctor's good nature and indulgence of his protégés amounted almost to weakness. There was a maudlin, stricken, and yet in his own way shrewd, creature who used to appear in the Doctor's room at an unearthly hour on Sunday mornings, ostensibly to look over the Doctor's wardrobe for things to press, clean, and repair, but in

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reality, as it appeared to a long-suffering family, to talk at the top of a most strident voice for two mortal hours about himself and his chicken farm, which latter the Doctor, in addition to his gratuitous surgical services, had stocked with game fowl for this walking megaphone. Nobody ever found out why my brother put up with these boisterous and ill-timed visitations — whether it was just angelic forbearance, or whether he was taking observations on the psychical effects of his brain surgery.

With reluctance I feel obliged, while on the subject of fees, to note that the Doctor's self-devised system of taking patients only from the fraternity was worked by the crafty, greedy, and unscrupulous of the profession to harm him in two ways at the same time. Until the medical profession is purified of such elements it is not likely, therefore, that his example will find many imitators. Tales of base rapacity have been indignantly told me more than once by the Doctor's friends. Slily taking advantage of the reputation Dr. Bernays had that "his fees would Croesus break in two," these commercial doctors would ask him to name a fee for an operation on a patient of theirs whose circumstances they described as limited. After prevailing on him to make it very modest, they would represent to the patient that Dr. Bernays' figures were very high,

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and would then charge several times the amount arranged with my brother and pocket the difference. In this manner his reputation for exorbitant charges was exaggerated, while the money so gained enriched these medical filchers.

Dr. Bernays never denied the current tales about his big fees. They fitted in with his desire and purpose to increase the honor and recognition of medical service. Abroad, where orders, decorations, and titles are bestowed, and where men are looked up to and esteemed aside from their financial standing, they have the flattering, if somewhat fatuous, unc-tion of such intangible compensation to lay to their souls.

Items like the two cited below appeared from time to time in various publications. The Doctor never knew and never cared who gave them to the reporters — whether they were inspired by friends or by foes, whether they were dreams of some young, ambitious scribe, or whether one of his more callow assistants liked to revel in the thoughts of the riches “the chief,” an he would, might lay up. Thus rumor transformed the legend even then forming about him.

The skilled surgeon in a large community may have little time to spare from his arduous and rather grewsome labors, but there can be no doubt that he is well paid for them, and

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he stands a better chance of amassing a competency much earlier in life than the members of almost any other profession. I am prompted to this remark by an incident related to me by the friend of a surgeon whose name is as familiar to the people as that of any of the present aspirants to the mayoralty. This surgeon was in his office one evening last week when he received a telephone message to come at once to the residence of a well-known family in the West End. He got into his carriage with his implements, and inside of twenty minutes he had performed an operation for that particularly painful affliction, intussusception of the bowels, on a person well known in society. It took him practically no time to do the work. When he got to his office after the operation, he made out his bill and mailed it. The mail next morning brought him a check in response to his bill. The check was for \$1,500. Granting that the operation occupied twenty minutes, the surgeon estimated the value of his time at just \$75 per minute. I doubt if there is another man in the city who can ask and receive for his time any such amount. The surgeon in question, I may say, however, is so constituted that his capacity for expenditure is fully equal, if not superior, to his earning capacity, and that he would not have much more at the end of the year if he charged twice as much for his time, or very much less if he charged only half as much. From this I think it will not be very difficult for readers to name the professional gentleman to whom I refer.

A WEALTHY DOCTOR'S PLAN — HE NEVER SENDS HIS PATIENTS A BILL, BUT HE GETS HIS MONEY NEVERTHELESS.

The policy mapped out and pursued by physicians to build up a practice is in some instances peculiar. A well-known and able St. Louis surgeon was speaking the other night of Dr. A. C. Bernays. According to him, Bernays has a system which, though seemingly void of diplomacy, is, *au contraire*, teeming with it.

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"Bernays," he said, "keeps practically no books. He never presents a bill. I don't believe he ever presented a bill in his life. He is perfectly willing to let you come and settle at your will. If you don't settle, he won't bother you. Still, his bad bills amount to a very small percentage. He argues that he is working for a reputation rather than for money, and that the nonpresentation of a bill is calculated to make people have faith in his prosperity, of which Bernays has a large share."

His immoderate use of the knife was another fiction and ghost with which to scare the populace. He did, of course, in desperate cases, regardless of the possibly impending onus of writing a death certificate, where the patient had but the one forlorn chance of his life, dare that before which others flinched, and often, indeed, did he thus "snatch a prize from death." Conversely, however, in many instances where an operation was desired, recommended, and demanded by other physicians, did he advise against it, prescribe rest and a régime, and persuade the sufferer rather to bear a modicum of discomfort than call into action the scalpel. He faithfully tested the modes of operations invented by others if they appealed to him as rational and promising, but, if results were not favorable, he as unhesitatingly renounced them as he would a method of his own that had proved unsatisfactory. Likewise, where other surgeons had advised bloody and terrible invasions and devastations of the organism,

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he frequently cured by a slight and not dangerous use of the surgical apparatus. I am not, of course, at liberty to name those who were thus spared a most unnecessary shock and injury to their anatomy, advised by other surgeons, nor to indicate the advisers whose blunders were thus shielded. Many live, however, who know of such occurrences and who can corroborate these statements.

CHAPTER XII

DR. BERNAYS A TEACHER

Ideas strangle statutes.—*Wendell Phillips.*

It would be difficult to say from which of his aptitudes and activities Dr. Bernays derived most satisfaction — from his researches begun in his student days in Germany, from his power of recognizing the source of disease, from his ability to restore health, from the artistic finish and the originality of his methods in his operations, or from the magnetism he exercised with such joy in instructing others in his beloved profession.

His pupil, Dr. Willard Bartlett — so frequently quoted in these pages because of his aptitude for expression — speaking of my brother's natural equipment for his position in life, and especially his qualifications to teach, said:

He had more gifts of various kinds than any other man I ever knew. He ranked high as investigator, operator, and teacher. While in my eyes his greatest merit lay in his ability as an operator, in his being able to do things successfully which others refused to attempt, he was also a great teacher.

Dr. Bernays a Teacher

The chief value of his teaching lay in his being able to create enthusiasm in his students, and especially in those who were fortunate enough to become his assistants. He had inborn manual dexterity of the highest order, and this, with the lightninglike power to see and perceive, made his work so brilliant and so successful that the onlooker felt he was in the presence of a master. His intellectual capacities, though so varied, seemed to be exactly balanced.

He was in the habit of interjecting striking aphoristic sayings into the body of his discourse when lecturing or demonstrating. At the moment I recall the following of such epigrams: "The value of seeing others operate consists not wholly in what one learns how to do, but largely in seeing what not to do." "The greatest bravery I know of is that of a physician who, aware that he is dying, faces the continued decline without flinching. A general in battle, confronting the cannon, is conscious of winning glory by his self-command—momentary exultation carries him to heroism, but the sustained courage of the doomed physician is much greater."

In his lectures he was not always consistent. In fact—and I believe this to be a mark of genius—he was consistent mainly in not being afraid to be inconsistent when he felt it incumbent on him to be so. He was utterly careless as to the personal deductions his listeners might make. On one occasion he had the laughs against him when he impetuously declared he would not let a man over forty operate on him. A student at once asked him how old he was, and he was obliged to confess to thirty-nine.

When Dr. Bernays lectured, I have been often told, no other professor at Marion Sims College could get an adequate audience. The students seemed as if mesmerized, and habitually greeted him with deafening applause when he entered the lecture-

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room. This pleased him greatly. He was always frankly proud and delighted to be popular.

Since naturally I never had the privilege of coming under the instruction of my brother in the capacity of a medical student, and in order to be able to throw as much light as possible on this side of his activity, I asked the coöperation of several men who had the opportunity I lacked. Their responses indicated not only willingness, but eagerness, to aid me, and show that his soul goes marching on in the one sense in which he understood that phrase and would have had it applied to himself. From these letters I selected the one which to me seemed the most succinct and logical, that of Dr. G. G. Cottam, to whom I am indebted also for several important suggestions for this sketch of my brother's life, as well as for the valuable bibliography which will be found at the end of this volume.

Dr. Bernays as a lecturer was *sui generis*. He used neither the craft of the actor nor the art of the orator, but presented the plain, unadorned truth, without affectation, and so convincingly that to hear him was to believe him. In the early nineties, when I first heard him, he was lecturing on pathological anatomy; later, clinical surgery was added, and his fourfold qualification as embryologist, anatomist, pathologist, and surgeon, of each of which he was a master, enabled him to deal with his subject in a manner wholly impossible for one lacking in any one of those four closely connected branches. It appeared to be his delight to digress from one to

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the other as seemed necessary to emphasize his points, and he apparently preferred subjects which would admit of this versatile treatment. Developmental defects, especially, lent themselves in this manner, and he would begin by tracing the embryological stages, showing the period at which arrest would result in the particular defect under consideration; then he would bring out the normal anatomy of the fully developed subject, then the pathological sequence of the hiatus, and finally the crowning glory of the surgical correction. He fairly reveled in anything like this, and his enthusiasm was contagious, for his students reveled with him. We knew that he was in earnest, and we hung on every syllable. No one, not even the dilettantes and the "floaters," ever deliberately "cut" his lectures.

He used to come to the college a few minutes before his lecture hour began, and spend them in the little faculty-room behind the amphitheater, quietly looking over his "Gegenbaur" or "Hyrtil." Some of us wondered why, with all his tremendous store of knowledge ready for use, he found it necessary to do this. We determined to find out, and we did so. Opportunity presented itself in the shape of a rare anomaly in the dissecting room, and the next time he came to lecture we waylaid him and showed him the curiosity. Needless to say, he found no time to study that day; what was still more to the point, he lectured, without preparation, on that very anomaly we had just shown him. No one thereafter imagined for a moment that he had "read up" before his lectures; we realized well enough that all he was doing with the books was merely seeking inspiration for a topic. We might have known it before, for he never followed any regular order in his lectures. No rule of thumb or fixed schedules for him! Just as he chose his lecture subjects promiscuously to avoid anything approaching the stereotyped, he abhorred the thought of a student acquiring anatomy by mere memory committal of group after group of structures. He wanted his

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students to get an accurate composite picture of the various parts; whether they knew the names in exact order he cared not, but when he indicated a certain nerve or artery, or what not, he expected a student to be able to identify it, or, if he mentioned a certain structure, he expected the student to be able to find it. Mere book knowledge had no standing with him. "Do you *know* that, or have you just read it somewhere?" was a favorite question of his, always evoked by imperfectly grounded deductions on the part of students. His artistic talent was a helpful adjunct to his teaching. Points difficult of verbal description were promptly elucidated by a few strokes of the chalk or pencil.

Above all things, he was original. Students quickly recognize when a lecturer is following a certain author too closely, and are equally quick to condemn this parrotlike method. Per contra, they readily appreciate a man who offers them mental pabulum of his own creation, and in this Dr. Bernays excelled. He never said anything simply because some other man had done so, he never even copied a diagram from a book, he never used notes.

In short, then, the characteristics of Dr. Bernays as a teacher which would seem to me to account for his remarkable hold on his students' esteem and attention were, first, his absolute mastery of four correlated branches; second, his originality; third, his enthusiastic earnestness; fourth, his lucidity; fifth, his absence of affectation; and lastly, his evident sympathy with and desire to help those whom he believed to be earnest seekers.

My brother worked, as had his father before him, for more stringent preparatory requirements, better equipment for purposes of research, longer and better graded courses in the medical colleges of our country; but at the time of his death there was

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not in the length and breadth of the land more than the one solitary medical school — Johns Hopkins, of Baltimore — that approximated his ideals. He himself was obliged to draw his material for future surgeons largely from uncouth and uncultured southwestern country towns, and much of it was, in the fullest sense of the word, "raw." It is all the more remarkable that so many of his pupils became proficient, so that long before his death the Bernays school — by which name is designated the large contingent of younger surgeons who owed their training chiefly to him — had made a distinct place for itself in the estimation of the profession. Some of these men of his training are in the vanguard of surgery in St. Louis — others are leaders in other sections of our broad land. To be sure, my brother always maintained that the pick of his young men, his assistants, came from families of some culture; that they had had advantages of more than a superficial order before they entered medical college, although in many cases this preliminary training was due merely to the general atmosphere of the homes from which they sprang, supplemented by reading and studying on their own account. As he grew older he grew more impatient of the elements which attempted to push their way into the medical profession with an eye only to commercial profit —

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the desire to make a good living without preparedness, without vocation, without the indispensable qualities of energy, self-reliance, industry.

In a letter written about a year before he died, which the misguided youth to whom it was addressed sent back, with a whining remark affixed, he thus gives voice to his disgust with would-be intruders on sacred territory.

ST. LOUIS, May 3, 1906.

My Dear Sir:

I do not think you ought to study medicine. No one should enter the profession who has not enjoyed a tip-top early training in science and literature (old and modern languages). Uneducated men are always a disgrace to the profession, and begging is a very bad beginning. Go to preaching; no education whatever and but very little brains or money are required to make a preacher. The world is full of fools who will go to hear preaching.

Sincerely,

A. C. BERNAYS.

Nothing could better epitomize one phase of my brother's character than the bluntness with which he here banishes the pauper in intellect and backbone from his paradises and consigns him to the hunting-grounds of the authoritative, the revealed, the illogical. He was as sweeping and uncompromising as Voltaire, Paine, or Ingersoll in his contempt for what he believed fostered ignorance. Some one has well said that "truth is by its very nature intoler-

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ant, exclusive, for every truth is the denial of its opposing error." Never accustomed to mincing his words, the Doctor is indeed well described — in regard to his eagerness to testify for pure science by trampling on whatever seemed to be an obstacle to its complete triumph — by the words of that clever analyst of human nature, W. M. Reedy, who recurred, in his sketches of prominent men which he published in the *Mirror*, again and again to the complex and picturesque personality of A. C. Bernays. "He was not satisfied," Reedy says, "with simple dissent. He was always active and aggressive in his assault on established things, a rampant iconoclast, tempered with a humorous cynicism that is perhaps as aggravating as would be intemperate denunciation."

In his lectures his agnosticism was, of course, bound at times to be voiced with utmost candor, and to some of his pupils, and to friends whom association had brought into contact with men and women who accepted and practiced Christianity at its highest, this side of his nature remained enigmatic and disturbing. These genuine Christians, who sincerely loved him for the great good they saw him daily and hourly accomplish, grieved at this attitude of his and secretly prayed for him. One of his pupils remarked that his dislike of creeds seemed

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to be based on his conclusion that they were all hypocritical. He had heard him say that the only church for which he had any respect was the Catholic, in which there was at least an intellectual aristocracy that frankly ruled the mob.

I give a few of my brother's convictions on the general objects and methods of education as, often repeated, they have impressed themselves on my memory. For mere traditions he had little reverence. The blind worship of the historic fetish, so often the means of retarding progress, he disliked and disapproved. His face was set forward, his mind and imagination moved onward. The cut and dried, the mechanical, he loathed.

Much as he admired Germany in its recent accomplishment, much as he loved the spirit of her universities, on some of her elementary education he looked with pitying eye. Inasmuch as it often stifles the wonder impulse of the child under a mass of erudition; inasmuch as it fails to educate the senses — goes so far as to sometimes injure these indispensable servants of the mind by overwork; inasmuch as it frequently leaves awkward and untrained, by failure to trust and try, the natural powers of the child, he objected to importing German methods unsifted and unsorted into our educational system. He often pointed out that European chil-

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dren are taught by masters according to set, unalterable rules much of what Americans acquire of themselves. "Swimming, riding horseback, shooting, we learn spontaneously — frequently in direct disobedience to our parents' commands; we learn them not by rule and rote, but in the harder school of experience, where resourcefulness, caution, self-command, and other necessary qualities are taxed at the same time," he was in the habit of saying.

He believed that in a contest of power between Germans and Americans, the latter would win in the end, though the discipline, the training to an obedience that moves them as one man, was likely to obtain initial successes for the Germans. The superiority of the American, he declared, lay in quickness of perception, in individual self-reliance, in the adaptability to unlooked-for circumstances, the readiness to invent and put into practice devices as efficient as unexpected and novel.

The modern technical and vocational schools, as evolved by the Germans, he heartily approved of, and desired the introduction of something similar in the United States. The training of the hand must occur simultaneously with the education of the eye. He believed with Goethe that reflection alone can not make a man know his duty and his fitness. Only action will secure acquaintance with self, and

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will reveal the duty each day demands. Thought and action as expressed in science and art should dovetail. The aim of education should, therefore, be to discover the highest activities for which each individual is fitted, and train him in the superior methods of exercising such activity, whether it be a craft, an art, a trade, or a profession.

Ignorance of what has been accomplished before acts as a waste of power. The point of departure from which to range afield into new exploit should be known, so as to save time and energy that is else foolishly expended in going over ground already prepared as if it were untilled. Here the history-loving mind of Europe scores. Inventions abroad are patented but once. Priority of thought is easily established, except in rare cases.

On the constant exercise and the development of the reasoning power, its liberation from prejudice, my brother laid the greatest stress. To do a thing well was something, but, unless the processes of the mind could be noted, unless conclusions could be drawn from the practice of a craft or a profession which would stimulate and produce thought and activity in others, there was something lacking. This continuity in the striving for perfection, the storing and handing down of knowledge, this passing of the torch of science from man to man, each

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one to be eager to trim it and make its flame burn brighter, was his greatest concern.

No one knew better than he that for the genius there is no narrowing down to methods of the schools. The Leonardos, the Goethes, express themselves in new ways and find their own royal road to wisdom, which they travel at their own pace. To nature they go invariably, search her manuscripts — cryptic to others — read them, translate them, make them productive, beautiful, prophetic for the race.

It is the chief office of education to point out the way of usefulness to the average being. Here Europe as well as America offends against the spirit of wisdom. Confusion results instead of clarification by offering, as we do, too many stimuli to the groping immature mind. They act for the most part as dissipations, as temptations to a sterile curiosity or vanity. The power of concentration is sacrificed to the foolish fear that a talent be overlooked. In Europe there is the peril of pedantry and stultification by creating in the youthful mind a glut and excess of knowledge based on authority. This stunts and stifles self-expression.

Only wise masters, who have the intuition, the will, the patience to trace individual needs, and further them, can pick the way between the snags

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and difficulties that beset the path of the educator. Therefore it should be borne in on a misguided generation that the teacher's mission is the most important, the most worthy of reverence. Men and women possessing the special equipment needed by the teacher, in the high sense of the word, are rare. Their price should be "above rubies."

One of the grudges held against my brother by some of the commercially minded was that at times he would launch forth in a lecture against the use of drugs to the prescribing of which the uninspired physician is only a trifle less addicted than the outright quack, who "pours drugs out of bottles of which he knows little into bodies of which he knows nothing." Of course to such as made the nauseous, and they cared not whether noxious, nostrums their chief means of income, this propaganda of my brother was most inconvenient.

He used to say laughingly that in some ways he was a forerunner of "Mother Eddy" and her activity as far as she encouraged optimism, trust in the healing power of nature, and discouraged the indiscriminate and profuse use of drugs. He knew the tremendous force of suggestion, and consciously and unconsciously drew on his optimistic temperament to inspire and fan to new life in his patients the will, the confident belief in the restoration to

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health. For this reason his mere presence acted like magic on his patients, and he could well banish from his pharmacopeia all but Napoleon's three chief principles of health — water, air, and cleanliness — to which he added light as a fourth.

It goes without saying that in his lectures and clinical demonstrations and in his writings he never relaxed his insistence on asepsis. As a matter of fact, the last article he wrote, the proof of which I corrected after his death according to his manuscript, was one on asepsis for the new medical encyclopedia then in preparation by the United Editors' Association of New York.

I close this chapter with a reprint of my brother's farewell remarks to the graduation class of 1896 of the Marion Sims College. It embodies, in a sort of brief third testament, the tenets of a code of morality of his own.

FAREWELL REMARKS TO THE CLASS OF '96 OF THE MARION SIMS COLLEGE OF MEDICINE, DELIVERED AT THE ANNUAL BANQUET TO THE ALUMNI AT THE ST. NICHOLAS HOTEL, ST. LOUIS, MO., APRIL 2, 1896, BY PROFESSOR A. C. BERNAYS.

Gentlemen:

Permit me to read you the following quotations and thoughts that I have selected for you:

Remember that having fine sentiments is a poor substitute for being a man.

Remember that "dignity is no more the sign of wisdom

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than a paper collar is of a shirt." All quacks wear silk high hats and make a show of dignity. The scientific attainments of doctors are almost exactly in the inverse ratio to their show of dignity and pose. Ignorance is most easily hidden under the cloak of dignity and by keeping a close mouth.

Remember to judge people by what they do, not by their sentiments — especially yourself.

Remember that in order to freely and cheerfully recognize merit in others, you must be worthy and meritorious yourself.

Remember that you may have your best friends among those who disagree with you. Men can disagree with their heads and agree in their hearts.

Remember that prejudice hurts the one who cherishes it much more than the one against whom it is aimed.

Remember that it makes no difference at all what a man believes, but it makes a great deal of difference what he knows.

Remember that the way to conquer prejudice is to live it down. Do not discuss it with others, waste no thought on it yourself.

Remember that it is brave to be in the minority. That is where the strong usually are. Weak natures can not stand alone, but must lean on the majority.

Remember that it is the nature of science to ignore authority, to look away from it, to pursue its own course in order that it may arrive at the highest and most important truths without prejudice.

In your lives follow nothing but the beacon light of reason. It will lead you to the truth.

Remember that schools are the churches, universities the cathedrals, where the only true religion can be found, and that the only possible savior of the human race is science.

Remember that after tonight you must give up text books in order to study nature. The only way in which you will be able to advance the interests of our profession will be by adding to our knowledge; the only way in which you will be

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able to do that will be by using your trained senses in observing facts and by recording your observations and reflections in a scientific medical journal.

Finally, gentlemen, remember "there is no darkness but ignorance," and remember in your toilsome professional career to shed as much light along your course as you may be able to create or to reflect. Remember my oft-repeated commandment: Scientific truths must be freely given away; they are priceless, and one who trades in them is unworthy of the ware. Give them to others just as you have received them from me at this college from which you have graduated tonight. I hope that the wants of your bodies and the hunger of your minds may be satisfied, so that you will be happy enough to make others happy.

CHAPTER XIII

DR. BERNAYS ON THE TURF

My tastes are aristocratic, my actions democratic.—*Victor Hugo.*

If a man empties his purse into his head, no one can take it from him.—*Benjamin Franklin.*

If it is a vice to love what my brother exalted by the resounding phrase, "the sport of kings," then he undeniably had that vice. And there's nothing for it but to quote once more the familiar passage from his good old colleague, O. W. Holmes: "People that do not laugh or cry, or take more of anything than is good for them, or use anything but dictionary words, are admirable subjects for biographies. But we don't care most for those flat-pattern flowers that press best in a herbarium." Agreed, except as to the "admirable subjects for biographies." Not even in Sunday-school biographies, if the truth were told, is the stainless hero really preferred. In fact, where can more vigorous and picturesque sinning be found than in the favorite hunting-grounds of Sunday-school biographies — the Old Testament? Not

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even that trick of Jacob's, whereby he got the better of old Laban on lambs, nor Joseph's cute corner in Egyptian wheat, is severely censured there, though usually some disapproval is expressed of Solomon's generous allowance in wives and King David's double betrayal of his servant Uriah.

A stainless hero is a colorless hero. A biographer who does not appreciate the shadow as a means to bring out the lights in his portrayal has neither the temperament of the artist nor yet the spirit of the warrior arming for the defense of that which he loves and reveres. A biography which, moreover, leaves out the faults, the vices, the limitations of its subject, is a lie that has no excuse for existence. Therefore, though it was not in me — which was neither a merit nor yet a fault of mine — to share and condone the Doctor's predilection for horse-flesh during his lifetime, I feel in duty bound here to handle this darling vice of his in the open — even as he would have had me treat it.

Inherent in him, as it is in many men, was the gambling spirit; the strong desire to pit his judgment against that of others, and, backing it with that symbol of symbols of power — money — win more money. Win it just to have it, as a symbol, as the golden background deemed most becoming by men and women all over the world; win it to throw it up

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in the air, as a rain of gold, that it might fall into whatever lap it would; win it for the joy of buying more horses to keep and train; to win again, and so on in an endless chain. The psychology of the gambler! Is it not the psychology of those the multitude acclaims as the cleverer, the more optimistic, the courageous, the generous among its fellow-men?

Aside from this neither fine nor laudable, but entirely human and most entirely American, desire to win money, the Doctor was fond of the sport from the love of the horse. Though he loved all live creatures, the horse was his favorite animal. It had the physical qualities he most admired—swiftness, sureness, beauty of line—and he saw in it a capacity for development of these physical traits, and even of such the humans call moral and intellectual—judgment, *flair*, ambition.

Furthermore, there was the mystery of the thing; for there lingered in him the desire of the moth for the flame, the tantalizing urge to penetrate and vanquish “the unknowable.” Strictly a *noli me tangere* district this unknowable was to him in science. With a firmness and a finality from which there was no appeal, it was banished from his researches and studies. But they had called him the “luckiest” surgeon in America—in the world—

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and, though none knew better than he that this luck of his rested on the solid rock compounded of talent, energy, and accurate, hard, patient work, there was probably left in the subliminal region of our common human nature, above which he could no more rise than other good men and true, a something made up of vanity and lurking superstition, a vestige of the "throw-back" to the savage instincts which made him at times give ear to the flattering thought of being singled out by destiny for special favors — for "luck."

Innumerable anecdotes about my brother's exploits on the turf are current. A few incidents which I witnessed or know to be true, and his conduct when they occurred, may serve to illustrate this phase of his character.

Once, when I was with him at Saratoga in the summer of 1890 or 1891, I was ill and keeping my bed. It was a bleak, gray day in June, and nothing without tempted me to abandon my bed and book. Breezily the Doctor entered as I was languidly sipping my coffee, felt my pulse, laughed, joked, teased, called my illness hysteria — which he knew I considered the most insulting of diagnoses — and, wheedling, cajoling, scolding, while deftly flattering me by calling me his mascot, succeeded in making me get up and go with him to the races.

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It was a feat to accomplish, because, aside from my feeling distressingly unfit, nothing bored me quite as much as the races in a place where, in the long pauses between the running, I had not even acquaintances to look at or chat with. But the Doctor was so delighted after he had gained his point that his laughter and good humor made up for the lack of sunshine and familiar faces. He lost pretty steadily on all the races until near the last, when one was scheduled with only a few horses to run. I have, of course, forgotten all important details, such as weight, pedigree, record, jockey, stables, the names of the horses entered, or even the name of the winner. I remember only that the Doctor called one "an old timer who used to win." He was anything but a favorite, and they were laying eighty and one hundred against him. The Doctor came back from the ring, his eyes sparkling with excitement. "I am lucky on long shots," he said, "and because you are with me today I have put \$10 on the old timer to win and \$10 for place, and I bet he'll make some money for me." Sure enough, the "long shot" came in first, and the Doctor went home fingering a "wad." That afternoon he sent me an immense box of the most expensive flowers and a marvelous hat of gold lace and black plumes, at which he had seen me cast a furtive and

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resigned glance as I passed the swagger modiste's shop window where it was resplendent.

The tale of his saving the mare Slipalong when he was at Saratoga in 1889 characterizes well his impulsive desire to preserve the life of and the possibility of getting progeny from a highbred animal, as well as his originality and his swiftness of resolution and energy of action — his ignoring of conventionality. They were about to shoot the injured creature after she had slipped and broken her leg in front of the club house, when he came running up and begged the owners to let him try to save her. "I am not a horse doctor," he said, "but I can set her leg, and, though she will never race again, she will live." The Franklins, who owned her, had no objection, of course, to saving the blooded creature. He put her leg in plaster of Paris, and had her so hung in a canvas swing as to take the weight off the leg. She recovered, was sent back to Gallatin, Tennessee, and there lived and served her owners as a broodmare for years.

"The Laryngotomy on Long Odds" another story might be entitled, which even now tickles the risibles of habitués of the turf when they think of it. It shows the Doctor as acting on a theory which his flourishing imagination and his self-confidence represented as practical and plausible, but which did

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not, on the test, work out as foreseen in his fancy. "Long Odds," it seems, was a promising racer in his earliest youth, and as a two-year-old almost equaled the track record of five furlongs. But he "went wrong." Before he was a three-year-old he had a laryngitis, and had become what in racing parlance is called a "roarer." Thereafter he could not go further than three-eighths to one-half mile. That much, however, he could do at phenomenal speed. August bought him because he believed he could cure him of his scarcity of wind by an operation. Seeing the horse had the racing spirit in him, he felt sure, if he were physically fit, his ambition would keep up his speed for more than his accustomed half mile. So August arranged with the Fair Grounds' officials to provide a race at five-eighths of a mile for horses that had not been one-two-three in a race for two years. Needless to say that when this race was announced there were many entrances.

About a week before the races the Doctor operated on Long Odds, and when, two days before the event, the trainer tried him out he ran the half mile in fifty seconds. It was the unanimous opinion of those present that morning—the owner, the trainer, and a small group of friends—that nothing save some unforeseen accident could cause

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Long Odds to lose in the coming race. On the great day the horse was listed early by the Doctor and his intimates. The trainer reported him in the pink of condition. He had breezed him again that morning through the stretch, and in his opinion there was never anything put over the plate in St. Louis to equal this. "Why, Doc, he can't lose!" he kept repeating.

There were about fifteen starters in the race. The price against Long Odds was longer than against any other starter — at first 100 to 1, then falling to 500 to 1. But after the Doctor had imparted his faith in Long Odds, together with his reasons for such faith, to a few of his dear five hundred friends, and had sent his commissioners through the ring betting \$2 all ways on the animal, the price rapidly fell. The public pricked its ears, caught on, got aboard, and Long Odds went to the post at about 2 to 1.

At the post Long Odds, as well as several other horses, "acted badly," breaking away repeatedly, but after about twenty minutes they were off. Long Odds, in the center of the bunch at the start, lost no time in getting to the front. At the first eighth he was six lengths ahead, and at the quarter he had increased the gap between himself and the next horse to ten lengths. The others straggled in procession.

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At the three-eighths something seemed to happen. Either the horse nearest Long Odds suddenly acquired a new lease on life, or Long Odds took to racing crawfish fashion. At the half the revived horse had passed Long Odds, and during the last eighth every other horse did the same. The subsequent fate of Long Odds need not be dwelt upon. His life-lines henceforth lay not among the élite of his species.

My brother would talk about a horse being "smart" exactly as if it were a human being, and at times took the same interest in a horse's education as if it had human understanding. With him the sport was more than a hobby—it was a passion. He entered into it with all his mind, all his heart, and brought to bear on it all his powers, physical and mental, so that he was both wise and foolish about it. But he was not built to do things by halves. When he worked he bent all his complex and wonderful make-up to his work; when he played, it was with equal zest.

Going to the races, betting on them, keeping a stable, and having his own horses trained, adding some of his original notions to the ordinary methods of the trainers, was his playing. It took his mind completely off the agitating career he followed with such intensity. The constant excitement of

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handling human life at the crucial point, where the death angel hovers near, demanded a counter-interest. Many of the former great surgeons deadened their nerves with opiates or with drink, and many were addicted to games of chance. Few of those who are original and daring, and who do not select their material, rejecting desperate cases, are sufficiently cold and lacking in temperament not to become more or less openly prone to some form of excess. Only where the blood runs hotly through healthy veins, too hotly to be always bridled, is genius found. Blake has well said, "The road of excess leads to the palace of wisdom." It is but too obvious that this road is often a short cut at the same time to death, which may be the open door to yet greater wisdom, or the door shut forever on the wisdom obtainable by the individual. That Dr. Bernays' life was too early cut off by his exciting life-work, together with the equally unchecked love of exciting sport, is probably true. He followed, in living as he lived, the law of his imperious nature. A big, bright flame blown upon by a vigorous wind soon burns up the fuel, diffusing heat and light. A feeble glow smokes and smolders a long time, but it warms nothing—brightens and lights up nothing. If noticed at all, it merely irritates until it is forgotten.

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My brother knew — at least he early had a presentiment — that his life would not be long. On the day our father was cremated, December 20, 1888, he told me that he would barely live to see fifty. Often he repeated a phrase I once quoted to him from one of the late Edouard Rod's novels, "*Que la vie soit courte et bonne!*" (a short life and a merry one!) He must have known that the double excitement of intense work and strenuous play created a strain too heavy for his heart to bear long.

Yet even after the *memento mori* he had in 1903 he did not entirely relinquish racing. As late as 1904 he bought some horses from J. D. Lucas. I recall the rainy Sunday afternoon in spring when we sat in the picture-room of the old house on Laclede avenue after an early dinner, and I helped him name them. He explained how the naming was usually done, so as to recall the parents or other famous ancestors of the young animal. We succeeded in finding some of the most ludicrous combinations imaginable, and the Doctor's mirth was as in his youngest days. He enjoyed my giving up for once my attitude of detachment toward racing and adding what literary reminiscence I could quickly summon to the task in hand. He waxed jubilant, and saw in his mind the string with such

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freakish names as Hast Du Geseh'n, Rhyme and Reason, Sartor Resartus, and Donahigh as big winners — perhaps one of them crowned with the Derby. But, sad to say, their *recherché* names were not efficacious. They never did more than "also run," and a creature answering to the inglorious and plebeian appellation of "Broodler" served to offset the Doctor's losses on the string of the weird and far-fetched names.

It was not to be marveled at that the Doctor's enemies seized upon and made most of his foible for the turf. When his skill as an operator and his scientific reputation were long established past question or doubt, it never came amiss to play to "the gallery" — by raising pious eyes of horror to Heaven and shaking fat, self-righteous heads at Dr. Bernays' "dreadful habits and associations." This did not worry him as much as it did his relatives and friends. He trusted the *élite* of the profession (the "dress circle" in his parlance), especially the rising generation, to compare his results with those of men who were mere pillars of the church or high dignitaries by pull and influence, who guessed at anatomy, trusted to God as to the pathology, and with fingers all thumbs bungled through their operations.

The reporters and the caricaturists naturally also

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made free with the sporting side of the Doctor's life. The strong and widely diffused interest taken in racing during the quarter of a century of his activity made the individual manner with which a man of his scientific reputation approached this sport a piquant dish often to be served to a public hungry for details about the habits and temperament of men of distinction. I do not remember when the first caricature of him appeared. It was a foregone conclusion that this tribute, marking the transition from a personality to a personage, would harp on his weakness for the turf. A number of such caricatures, rather lacking in subtlety, exist, as well as innumerable more or less witty allusions in the sporting columns of all the publications of the city to his opinions, his experiments, his winnings, his losses. Once or twice he publicly abjured all further connection with the sport, disgusted with himself as well as with the whole atmosphere of the stables and the tracks, and went back to it again and again from pure perversity, or eager to work out some fresh notion — some new theory for the development of the horse.

One illustrated interview from the *Globe-Democrat* represents him in exaggerated rotundity standing on an inverted tub haranguing a horse that looks like a mule. His short legs are abbreviated

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to absurdity, and a hook-nose he never had embellishes his countenance. But somehow the attitude and the gesture of his hands and arms suggest him perfectly. The article is headed, "The Horse's Brain Must Be Trained — Dr. Bernays Has Views About Educating the Racing Equine." He is quoted as saying:

Ninety-nine out of every hundred trainers work on the theory that the art of conditioning a horse physically is all that is required of them. After learning how to condition a horse, they immediately proceed to pose as competent trainers. In their estimation nothing remains for them to do but to get good horses and establish a reputation as a trainer of the first class. Of course I don't deny that the art of conditioning a race horse is one of the essentials to the success of the trainer. After a horse is thoroughly developed, a first-class mechanic can go ahead and win with him, but my argument covers the early development of the animal. When a horse is in the junior stage of life, a trainer who can convey to the youngster an idea of what is desired of it on the track is the man who is a real master at his business. Some horses are superior to others in intelligence; this kind can be taught much easier.

Hamburg is a great horse because he knows what he is sent on the track for. I saw him run in the East last fall, and he does it artistically. When he lines up before the starting gate he never wastes any of his strength in rearing around and acting badly. Neither have I ever seen him run very far in a false break. Somehow he always knows when the start is a go, and invariably gets away in a good position. In running he also shows superior intelligence to the average horse. His style and action are perfect. He runs fast with-

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out apparently the least exertion. His feet work close to the ground, and every spring is executed gracefully and rapidly. Like the great Hamburg, Mr. C. C. Maffitt's colt, Gibraltar, is a good horse for exactly the same reason. He knows what is wanted of him when he gets away from the starting gate.

The general run of race horses are trained alike. In their two-year-old form they are broken and worked to a point where their trainers think they are ready to race. A jockey is then lifted on them with whip and spur, and told to get off well, take the shortest way around the track, and win as easily as he can. If the colt or filly acts a trifle unruly before the gate, the jockey uses his whip or steel to subject the animal. In the race, no matter if the colt is running as fast as it possibly can, the jockey will invariably ply the lash and stick the steel into its flanks.

This sort of treatment at the outset of a two-year-old's career has a tendency to sour the animal. After being used in the same manner year in and year out, the horse gets cunning and runs that way. The animal knows that it will be fed, win or lose, and simply goes through the process of racing on the track in a mechanical manner, without the fire and dash that characterize all great horses. Fire and dash are the keynote of my theory. Inject them into your horse, and you will have a sure-enough race horse. Without them little can be looked for. I wish I had the time to make an elaborate study of this question, and satisfy myself by personal experiments. I believe I could solve the mystery of how to train the horse along scientific lines, and do it thoroughly.

The men who know how to do it are unable to tell how they accomplish it. It seems to be a knack that comes to them in a manner utterly inexplicable. I have talked to men whom I considered thoroughly capable of telling me what I wanted to know, but they failed to satisfy my thirst for knowledge; not because they didn't care to oblige me, but simply

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because they couldn't. During the past three or four years I have been having my own horses trained according to my own ideas. I admit that I have achieved nothing to brag about, but I hope to do so eventually. When I get this thing solved, I expect to win stakes with Sir Joseph Lister and Equitome.

This, in his own words, shows his preoccupation with the scientific side of the problem of achieving high-class horses. He probably believed that with his equipment as a student of biology he was destined to revolutionize the systems in vogue. For a time he tried feeding his colts on sodium-hypophosphites in order to develop their cell nuclei and bones—to build up their tissues, in other words. But nature did not take the hint—the colts so fed also disappointed him. The mystery of making them winners, which he constantly dreamed within his grasp, continued to elude him. To hear him talk, he almost believed horses had souls that could be inspired to victory. This was the more amusing because he would perversely deny soul to the humans on occasion, arguing, as was absurdly obvious, that in his dissecting he had not come across its seat.

His master passion frequently interlined and attempted to dignify his infatuation for this sport. Some of his horses were named The Doctor, The Surgeon, and Sir Joseph Lister in compliment to

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his profession, with a desperate emphasis on his more serious self.

A horse named in his honor, Dr. Bernays, turned out to be a very successful racer, and made quite a record on southern race courses as well as on the Pacific coast. It is told that my brother once encountered his namesake — in Memphis, I believe, in 1903 — on the turf and permitted himself to be dared, and guyed, and jollied into backing the equine Dr. Bernays for a considerable amount, with the astonishing result that he made a big winning — some give the figure at \$5,000.

In spite of such occasional windfalls, his predilection cost him several fortunes, as well as things infinitely more precious than money. His friends say that he was plucked by his trainers, jockeys, and attendants, as well as by the bookmakers. Most likely that is true, and in his heart of hearts he seems to have been contemptuously aware of being thus cheated. The fact that for a time he entered his racing horses and received racing periodicals and other literature under the significant pseudonym, Mr. Jay Easy, would indicate as much.

After all, his ambition of winning the Derby with a self-selected colt, reared according to his ideas, was never realized. Indeed, no horse of his won a great race, and that must have been a sore disap-

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pointment. On the other hand, he extracted genuine fun and the joy of anticipation out of this intense form of play, and he regarded the time spent in the open air, inhaling, as was his wont, deep draughts of ozone at the old St. Louis Fair Grounds, at Saratoga, and at other beautiful resorts as an asset to health.

CHAPTER XIV

DR. BERNAYS' TEMPERAMENT

Nothing distinguishes great men from inferior more than their always knowing, whether in life or art, the way things are going.—*Ruskin*.

In a very stimulating volume entitled "Great Men," which Professor W. Ostwald published about two years ago, he divides the scientific men who advance the thought of the world into two classes — the romantic and the classic.

The romantic are precocious, swift even to the precipitate and premature in thought and action, strewing broadcast their ideas early in life, giving them out before they have been thoroughly tested, full of enthusiasm themselves and endowed with the power of arousing enthusiasm in others; therefore successful and popular leaders and teachers — emotional, impulsive, optimistic.

The classic are deliberate, phlegmatic, sometimes even melancholy, never putting forth an idea until they have worked it out and proved it beyond the possibility of a doubt, prone to be reserved, unso-

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ciable, disinclined to give or take ideas, unsuccessful teachers, unwilling or unable to stimulate and arouse the young by contact, dominated by reason — almost never by feeling.

According to Professor Ostwald's classification of the temperaments of scientific men, my brother was distinctly of the romantic type. The description above given of the peculiar make-up of this type fits him like a glove.

Dr. Bernays fully indorsed the Osler dictum, so much discussed within the last decade of his life — maintaining not that a man's usefulness is over at forty, but that what is accomplished after that age is based on conceptions dating back to younger days. Osler is, indeed, far from being the first to make this announcement. It is well known that Goethe dwelt on the fact that all the vast arsenal of ideas with which he worked until he died at 82, as well as the array of figures and types he created, were the fruit of his youthful imagination and thought. Though not always expressed, it is a conviction probably entertained by most thoughtful, somewhat introspective, persons above mediocrity. That the qualities we call creative are early atrophied and quite disappear with advancing years in men distinguished for these very traits in youth is an ancient commonplace. The Greeks two thousand five hun-

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dred years ago said those whom the gods love die young. The desire and the power to successfully guide the young diminish as the years increase, and the hair grows gray or the head bald, so that even a man like von Liebig, the most brilliant teacher of his time, who for thirty years supplied the world with chemists of his training, when a little over fifty began to dislike and finally abandoned this form of activity.

It is true that the appreciative faculties hold out longer, and deep and wide experience of life would seem to make keener the enjoyment derived from intellectual appreciation. Still, even that is relative — is only seeming. At any rate, nothing can come up to the delight confined to youth — of having by a combination of the imaginative and reasoning faculties arrived at that which is called creative. The sum of happiness must lie for the scientist in the consciousness of having helped weave the garment of life by some discovery, and for the artist in having added a bar to the rhythm of the universe. And these achievements are those of youth.

One faculty increases with the years — the prognostic. Modern science is restoring to renewed respect the gift of prophecy. For the exercise of this

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function, experience is desirable, necessary, unless the gift be the obscure phenomenon known as clairvoyance, which is still overhung with thick clouds of doubt and trickery, or is a pathological condition. The prophetic gift that has legitimacy is based on knowledge of causes and circumstances, on close-knit logical processes of the scientific mind, accompanied by imagination. This gift my brother had in a considerable degree, as was early perceived by that profession which in our time makes the most acceptable bid for the rapidly passing quality of universality or at least versatility—the journalistic. The late Joseph McCullough, as well as the present editor-in-chief of the *Globe-Democrat*, Henry King, were both friends of my brother, and a habit was early cultivated by the management of this paper of sending to find out Dr. Bernays' views on subjects of a scientific nature that had bearing on political events. It was realized after a time by all the local, as well as by some out-of-town, publications that my brother would be likely to know the "way things were going."

On an occasion, before discussed—that of the Duestrow case—the Doctor had got into one of his rare funks about being misquoted, and had vowed he would never submit to another interview.

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Then the following paragraph appeared in the editorial columns of the *Globe-Democrat*, presumably from the pen of the highest in authority there :

Dr. Bernays has sued the Duestrow estate for \$15,800. The *Globe-Democrat* has no objection, and is willing to leave the case to the courts. But the *Globe-Democrat* has an objection to the declaration of Dr. Bernays in connection with the Duestrow case—that he would never more allow himself to be interviewed by the newspapers. We can not afford to be thus ruthlessly deprived of a valuable contributor on subjects pertaining to the profession of which the Doctor is an honored member. And when the next great surgical case arises we shall have Dr. Bernays interviewed, and, if he feels aggrieved at the result, let him sue the *Globe-Democrat* for \$15,800 a column. Better for us to lose such a suit than to lose the light which the Doctor can shed on some of the most interesting topics of the day.

On the subject of Garfield's condition after he had been shot, in the cases of Grant's tongue and Emperor Frederick's throat, his opinion was requested and given prominence in the papers.

When, later, McKinley lay wounded by the murderer's bullet, my brother had acquired a position of such authority in the profession, as well as so much confidence in himself, that he did not hesitate to state, as soon as the attending physicians had published their bulletin on the condition of the patient, that there was no hope of his recovery.

On the other hand, when King Edward VII. was

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suffering from the intestinal trouble that caused the postponement of his coronation, he as confidently predicted the recovery of the royal sufferer. No wonder that, whenever some important, some history-making personage was afflicted with a malady, reporters came flocking to the Doctor's office and residence, eager for his views. Fearlessly and unequivocally he gave them, and proved "a good guesser."

The most curious *volte-face* was made during his lifetime by his own profession in regard to the information to be conveyed to the public on the subject of operations. W. M. Reedy quotes in March, 1905, from an article in *McClure's* on the Mayo establishment at Rochester as follows:

It is an axiom of surgical practice that the earlier the case is taken, the better the chance of success. It follows that, if we can educate the public in the matter of the common surgical ailments, our patients will come to us more promptly, and we can get better results. Besides, with the mystery dissipated, the terror of operations will be greatly diminished. Take a very common case—appendicitis. I venture to say that the majority of persons believe the operation for appendicitis a very dangerous one. In point of fact, the mortality is less than in diseases which are not feared at all—measles, for instance, or whooping-cough. Could we implant that fact in the public mind and get all our appendicitis cases early, instead of at the last development, as many of them now come to us, we could reduce the present low mortality by half. The

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policy of silence is a relic. It was made for the days when a physician who talked exposed his ignorance. Surgery is no longer empirical; we know what we are doing, and we can afford to tell it.

To this Mr. Reedy adds:

Dr. Bernays, for using this argument, was for years tabooed, but the taboo made him not less one of America's greatest operators, one of the highest ranking surgeons of the world.

His clearer and far earlier vision is being corroborated in numberless concrete instances of present-day practice. Dr. Bartlett, for instance, tells me:

When everybody was using the Murphy button or some other mechanical contrivance as an aid to stomach and intestinal suture, Dr. Bernays declared that a man who did not find needle and thread sufficient to do intestinal surgery had no business to tackle surgery of the hollow viscera.

On cancer my brother's views have been and are being more and more adopted. Pending, of course, some wonderful discovery of the cancer germ and the means of its extermination — which, alas, is not in sight — the earliest and most radical excision of all the tissue involved was what he advocated unswervingly. According to the reports of the cancer hospitals, after trying all known treatments, methods, and remedies — for some of which claims of efficacy were made — this procedure is now gen-

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erally adopted as the most successful way of coping with this most agonizing of human ills.

His determined and unceasing war on the indiscriminate use of poisons — not only on the part of the gullible patent-medicine-gulping laity, but on the part of physicians and surgeons prescribing them, is unfortunately still far from victory. Not too often can such emphatic statements be repeated as these taken from his "Golden Rules of Surgery: "

Rest secured by means of poison injected into the human organism is apt to do more harm than good. I am convinced that the administration of such drugs as belladonna, cocain, morphin, strychnin, veratrum, digitalis, and many other poisons to human beings, by even our most highly educated physicians, is wrong. We know but little of their real effects on the healthy animal; how much less do we know of their force and effect on the weakened organism of our patient?

I am of the opinion that the physician who uses drugs on his patient overestimates his own knowledge of the action of drugs, and nearly always has been misguided by his blind trust in the text books on *materia medica*. I wish to go on record as being opposed to the general use of drugs in the treatment of disease.

The idea that a doctor's main business is to write prescriptions must be abolished among the public. The scientific physicians can not but feel the deep degradation of being asked for a prescription without first having a chance to make an examination and diagnosis. The public must be trained to pay for the latter and not for the former. If we reach this appreciation of our work from the public, as many of us have done, there will be but little left for the prescription doctor and the ignorant quack to prey upon.

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Since these words were written five years have elapsed, and he who runs may read and perceive how the deadlock between the public and internal medicine has been growing more intense. The best physicians are, indeed, following the course above indicated — refusing to prescribe until they know what afflicts the patient, and insisting more and more on diet and regimen of life, thus taking the wind out of the sails of the quacks' ships, which, with the continued new creeds that take a hand in medicine, are coming to constitute a fleet — let us hope, an armada — that will soon be wrecked on the shoals of scientific enlightenment. His suggestions in regard to the clearing up of certain pathological conditions which sorely needed such clarification are also in course of general adoption. He advocated the abolition of the confusing word "inflammation" and the substitution of the words "infection" and "tissue unrest" to mark the distinction between processes that interrupt and retard healing and those which make for regeneration.

In matters not connected with his profession he was apt to take extreme views — views that were revolutionary, premature, and considered inexpedient at the time. His intrepid and imaginative temperament, stimulated by his ready and generous enthusiasm for what promised aid to those who

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need it most, made him in 1896 a strong partisan of Bryan and his doctrines of reform. He supported Meriwether in his campaign for the betterment of municipal government in 1901, and as late as 1905, at a time when he was far too ill to take an active part in politics, he allowed his name to go on the slate of the moribund Meriwether independents, whose very leader had lost heart for his own cause, in order to mark his loyalty and staunch belief in progressive ideas — possibly also to help split the Republican vote and better insure the reelection of Mayor Wells, whose first administration had done much toward making St. Louis a more habitable city.

Sometimes in national and international affairs his outlook was extraordinarily clear, as well as extensive, and he foretold future events exactly and with apodictic certainty. I have often privately dwelt on one of his predictions which filled me with wonder and incredulity at the time it was made and with awe when it came absolutely true. In 1897 I had decided to give our youngest brother, Walter, who had just graduated in chemistry at Washington University, and my sister's eldest child, Eric, who had become a member of our household early in that year, an opportunity of study in Europe. Taking Tantele with me to see her

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native land once more, the household for three years was to be kept up in divided form on either side of the ocean. The three bachelors on this side of the Atlantic—all old enough to change their state—were incidentally to be given a chance to find mates and build their own nests, and thus the stigma constantly being cast on me of making too comfortable a home for them might also be removed. It is true that the old nest was left with a tried maid of staunchest qualifications to keep it in order, and also true that on my return not a bachelor had flown. To come, however, to the point of my tale, the Doctor had accompanied us to the seashore, and in the hour of sailing he and I were leaning on the railing of the steamer for a last chat. I had been idly wondering what changes would take place in the United States in the three years of my projected absence. The Doctor was staring into the distance, sunk in one of his reveries. Suddenly he wheeled round to face me, and said slowly and impressively, as if he had read it in the clouds, "In three years from now the United States, after having engaged in war with Spain and having, of course, licked her opponent, will be riding the topmost crest of the greatest wave of prosperity that ever struck these shores." In vain I protested that our policy and our unreadiness for

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war committed us to peace, that the Cuban disputes were too trifling for a settlement by arms — all the things the nation believed up to the explosion of the Maine — but the Doctor shook his head and only said, "You will see." I doubt whether this foreseeing vision was held by any one else on earth at the time it was expressed with such assurance, force, and accuracy. The prophecy could have been made only by a man of the romantic temperament, optimistic by reason of his own capacity and achievement, trusting in the tremendous energies he knew to be stored up in a virile and self-confident people that was given to sudden paroxysms of feeling.

Yet, in the judgment of individual human character the Doctor was frequently at fault. He grandly erred on the side of a too optimistic view of men. Undoubtedly this is preferable to its opposite — groundless, cowardly suspicion — and, where there are rudiments of nobility with which to work, confidence does often engender the will and wish to live up to them. But it is possible to be foolhardy in one's assumptions. My brother indulged himself in "long shots" on character as on the turf, and often believed that for his sake the leopard would change his spots. He went incredible lengths in this. Even when he had proof

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incontrovertible that treachery was innate and habitual in a nature, and he saw a grain of capacity for good in such a person, he would say, "Give him another chance," or, "Well, I won't kick a man that's down," or, "No matter what he may have done, he will not harm me." Wherein, alas, he was often mistaken. Ingratitude and betrayal of his kindness hurt him to such an extent that he would not speak of it. And he met with some that screamed to heaven, as when the parents of the child he had saved from certain death by that truly wonderful operation of establishing the passage through the shrunken esophagus into the stomach, described in the chapter on his "Daring," sued him for \$60,000 damages because he had published in a medical pamphlet without their consent a cut of this child, mentioning her initials only, and showing by diagram the work he had done. The jury did not need to be told, as they were by my brother's attorney, that the plaintiffs in the suit ought to have erected a \$60,000 monument to the man who saved their child, that was playing gayly in the court-room at the time, when without the intervention of his skill she would undoubtedly have been filling a little grave.

On some subjects he and I differed. Strange to say, on the possibility of redemption from the sin

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of betrayal, woman that I am, I hold the stern and skeptical belief. With Dante and other great readers of the human heart, I am constrained to see that treachery is inborn and ineradicable—a bar sinister on character that stains it through and through. All other vices can be condoned. But how meet falsity except by its like? You have no choice. There is nothing to which to make appeal. You can not choose but to become either the dupe or the accomplice of that kind of blighter of the joy of living. But the Doctor was Christlike in that, though knowing of the Judas sin, he did again and again take the sinner by the hand where I would have turned my back forever.

Still, at times he penetrated the mask of smug hypocrisy readily enough. One has but to read his chapter entitled “Off With the Cloak” in his “Golden Rules of Surgery” to see that. To speak of a concrete case, when he was ill of blood-poisoning in 1884 and wandering in his mind, yet recognizing the persons he saw, a brother practitioner, who had insisted on being admitted to the sick-room, was standing one evening at the foot of his bed. Pointing his finger at this man, who at the time had rank in his world, he said scornfully, and so distinctly that it was most embarrassing to the bystanders, “Show that old hypocrite out of the

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room." Individuals of his own profession whom he caught covering up inexcusable ignorance by pompousness and the guerdon of social position he called asses, and worse, in any environment, unconcerned at the likelihood of their hearing of his applying such epithets to their sacrosanct persons. Neither would he dance to the pipe of the influential if he believed that mere caprice or a trifling ailment summoned him. He could spurn with Rabelaisian rudeness an unwarranted attempt to deprive him of his much-needed rest. On one occasion the attendant on one of the wealthiest men in town, who, in the dead of the night, requested his immediate presence in the palace of the mighty, got for answer by telephone, "Oh, send for a horse doctor — I need rest myself." The stomach or jaw of an impecunious negro might command his service when the passing indisposition of the millionaire, however great the fee and the prestige to be obtained, would leave him unresponsive.

He occasionally acted on his impulses to a degree that was unwise and sometimes unpardonable in a grown person. But his weaknesses were so inextricably intertwined with his manifold charm and his evident power that it was hopeless to try to separate the former from the latter. Besides, his childlike candor and his contrition were disarming.

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Yet, with all his simplicity and directness, he was often complex and contradictory.

Those who heard him romancing sometimes on ordinary happenings of the day might have difficulty in crediting him with the unique, sincere, almost fanatic, devotion and accuracy he had in scientific matters. Nor would those who heard him disparage drugs have believed their eyes had they seen him in illness, as I have, allow himself to be persuaded by his medical adviser to use three kinds of "poison" at once. Perhaps the sick Dr. Bernays was more suggestible than the healthy; perhaps he did not mind trying the effect on himself, so as to know of his own knowledge what the drug would do; perhaps the optimist in him hoped against hope, or he just sought — sensitive as he was to pain — momentary respite.

He had the bad western habit of interjecting into his talk a great many unnecessary expletives, commonly known as "swear words." At times he used them so profusely that they weakened his statements, and when I pointed this out to him he would, with his unvarying gentleness toward me, promise to mend. Often, when the other men in the house forgot themselves in my presence and used the kind of words indicated in books for polite readers by dashes, he resented the offense and sol-

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emly enjoined me to forbid them such language under pain of banishment from my sight. In the very making of such a recommendation it was possible that one of the tabooed expressions would escape him, when to keep a sober face was altogether beyond me. Exhortations to members of the circle to economy had likewise only the force of humor. Shouts of derision often met his quixotisms. But he could parry attacks with wonderful aptitude and celerity of repartee.

Though the dean of our stronghold of celibacy, he exacted no deferential demeanor on the part of the other members, either on the score of age, position, achievement, experience, or knowledge. He knew that authority and deference would come to him as his due in lifetime or thereafter. When, like the rest of the world, we were plainly not ready for his deeper insight or farther horizons, he would calmly and firmly maintain his opinion without showing impatience with our limited outlook.

CHAPTER XV

DR. BERNAYS AT HOME

The intelligence feeds the affections. Who knows most, loves most, and he who loves most, enjoys most.—*St. Catherine of Siena.*

Very few people realized how much Dr. Bernays cared for his home, excepting, of course, the necessarily restricted circle who were frequent visitors in it, and who saw him in his capacity as host, as head of the household, as the blithe spirit that cast its spell of wholesome enjoyment of things as they are in this world over every one who came intimately within his radius.

Especially after we acquired the house on Laclede avenue, which, though of the dry-goods-box architecture of the eighties in its external aspect, had an old-fashioned, high-ceilinged, stately, and spacious interior, did he take great pleasure and pride in acquiring objects to decorate it—things that lent character, beauty, and interest to his every-day surroundings. He was prone to be too lavish in this, and, what with his purchases and the innumerable

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gifts of friends and former patients, the place at times resembled a museum. These indiscriminate gifts we designated by the generic title of G. P., signifying Grateful Patients. They varied with the taste and intelligence of the giver, from the truly beautiful to the tawdry, incongruous, and impossible. The Doctor naturally received every G. P. with his air of being immensely pleased — as he was with the gracious thought that inspired the giver — whether it was the stuffed duck of an ancient taxidermist, the antimacassar of a poor seamstress, the diamond ring of the millionaire, a beautiful bear skin, or a case of good wine. It was the feminine head of the house, in the person of the writer of this memoir, whose ingenuity was greatly taxed as to the discreet disposal and gradual suppression by stages of relegation to farther and farther back-rooms of that which she irreverently called “junk.” Things had such a habit of accumulating and littering the house that, after seeing on our visit to their island how the refined taste of the Japanese repulsed and abhorred the heterogeneous medley of objects with which we barbarous Occidentals dissipate thought and distract attention, she threatened to build a “go-down” in the backyard for the harboring of our own growing collection of *objets d'art* as well as of unsuitable G. P.'s

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— in imitation of the Orientals to bring out but one piece at a time, before which we might sit or kneel in study or meditation, until the intention of the artist penetrated and suffused our souls. This design was never carried out, however, and to the end of my housekeeping I struggled with superfluity.

We contrived, however, in the course of time to give the interior a rather unusual and interesting appearance, due to the massing of homogeneous objects, the arranging of colors, the lucky choosing of backgrounds, and the intrinsic value and rarity of some of the paintings, hangings, and bric-a-brac.

In a way the Doctor was what I sometimes called him, a sybarite, and yet — in contradiction of this — of the greatest simplicity. He was always buying arm and rocking chairs of ever more comfortable design, either for the house or the lawn. His bed was finally piled with mattresses almost matching in number those of the Princess of the Crumpled Rose-leaf in order to insure ease and softness, and to woo the capricious god of slumber. He was always eager to purchase whatever promised to lighten or shorten labor, whether it was for his own professional use or for kitchen or stable. When he traveled he must have the finest make of appurtenances, the softest rugs, the sturdiest trunks, all kinds of

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scents, creams and powders for the skin. At times he was lavish to extravagance, and yet suddenly he would draw the lines taut on himself, become almost austere, and criticise me for failure to be economical. He seemed always extreme, at no time and in no way holding a middle course. To me, who saw things with a soberer eye, it was, especially in my unformed salad days, difficult to follow his zigzag flights.

That he loved, admired, and overestimated me, as he undoubtedly did, has always been a profound and beautiful mystery to me. In my groping time of priggish youth, when I first realized this extraordinary fondness of his for me, I thought it my duty to admonish, lecture, and rebuke him in a misguided attempt to make him see the error of his ways with respect to betting on horses, keeping racing stables, and associating with the doubtful characters of the turf — trainers and jockeys, tricksters and sports — who, together with the ward heelers, bummers, and bosses of the political ring, had a peculiar fascination for him. The psychological make-up of these human pages amused him, and he kept up the study of them nearly to the end of his life, very much to his detriment, of course, in the eyes of "those who walked so straight," as he used to put it, "they almost fell over backward."

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My father once told me that August had begged him not to tell me of any escapade or trouble he got into, saying that he could not bear to lose a jot of my esteem and love. In the course of the years we spent together I became so accustomed to this warm garment of affection and genial fondness, that surrounded and spoiled and coddled me, that I never thought what it would be to exist without it. Luckily the Doctor's grand and noble soul, the abundance of delightful gifts with which nature in a bounteous mood had endowed him, made me early accept what the "best people" criticised in him as the concomitant defects of his qualities. Accordingly I gave up my attempts to "reform" him in time to admit of the real and close companionship that brightened all our mature years. Though womanlike and particularly sensitive where he was concerned, I never lost the dread of his injuring himself in the eyes of others by some of his impetuous speeches and incalculable departures.

When we were not together, his letters — nearly always short, staccato notes — dashed off with little attention to style, punctuation, or punctiliousness of any kind, came with great frequency. But, opposed as I am, on principle, to the preservation of family letters, I usually destroyed them shortly after perusal. A few of them were, however, preserved

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by accident, or because they revealed him in such a lovable mood that, in his absence, I could not bear to part with the visible proof, the assurance, and outward sign of his affection.

Here is the first letter I received from him in the fall of 1897, when I had established myself with a part of the family at Zürich.

SATURDAY, September 4, 1897.

Dear Thek:

I have been at home a week, and this is the first moment I have felt like writing to you. When I come home to the house and walk through the rooms, it does not seem like home. I have been going from room to room, upstairs and downstairs, like a headless and purposeless being. Everything is getting better, though, from day to day, and I have been able to sleep a few hours in one of the two beds which I have in my rooms. I hope gradually to get to feel that I am at home when I enter the big house, which has lost its attraction for me since you are gone. Wilson is living with us, and is a very good boarder, or rather roomer. Rosie is doing all I ask of her, and, in fact, there is no reason for me to kick, except that you are not here. There has been an enormous lot of work for me to do, and this will continue to improve, I know, in quality, if not in quantity.

We received a telegram from the steamship company on the day of your arrival, and are now waiting for a letter from you to hear about the passage you had and the company there was on board. I suppose Walter understands the workings of a steamship, and can demonstrate in figures how the coal is changed into heat and electricity and force, so as to do the work of moving the big tub across the sea.

Sir Joseph Lister won a nice race on fast time for me

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day before yesterday, which netted me \$810. Today he tries for the last stake of the meeting, and has some show of being in the money. My love to all, and I hope the boys will work with good results.

Yours,

AUG.

The wholly unexpected happened when I had been but eight months in Zürich. The Doctor, who, except for an accident of blood poisoning in 1884, had always enjoyed buoyant health, fell ill of some distemper, about the nature, the name, the reason, and the treatment of which his various medical friends and advisers were (as is usual in my experience of such things) utterly at sea. Auto-intoxication, a new disease, or rather a new name for an old disease, happened to be on the professional tapis for detection, diagnosis, and discussion that year — so that was the favorite imputation applied to his trouble. He wrote me so guardedly and reassuringly, however, that I could not — though vaguely alarmed — realize the gravity of his illness until in June of 1898 he came to me in Zürich, and was for a period of four or five weeks a very great sufferer — mostly bed-ridden, sometimes sitting pale, exhausted, and in dread of pain in the sun on the veranda, or, when feeling a little better, on a seat by the shores of the lovely lake when a rare, warm day of that chilly, Swiss, early summer permitted an outing.

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Various Swiss medical authorities were consulted, with no result. Various remedies were tried, but the pains in the shoulder, insomnia, loss of flesh, temperature persisted. Finally an acquaintance of mine, a Zürich lady, happened to call one afternoon, and her sympathetic mention of a Swiss practitioner, Dr. Seitz, of the town, so pleased and impressed the doctor that he decided to send for this man. Under his advice and simple treatment the Doctor seemed to gain immediately, and was soon able to come with me to the heights of the Rigi, near by, where, as by a miracle, he entirely recovered in the course of five or six weeks. The distressing pains and disturbing symptoms left him as mysteriously and suddenly as they had come, and he went home restored entirely, as shown by the following letters of September 20th and 28th of that autumn.

DAMPFER BREMEN, September 20.

Dear Thek:

The voyage is nearly over. We will be landed tomorrow morning at New York. As you see, we had an eleven-day voyage. It was not very smooth. I was troubled with *mal de mer* twice, but enjoyed the voyage pretty well.

The most entertaining person on board was Herr Constantin von Sternberg. He conducts a conservatory in Philadelphia. A musician and a very high-class artist. He has the thing down fine, and for the first time in my life I heard an explanation of the difference between Wagner's work (not Wagner's music) and that of the other writers of operas who preceded him. He says that the drama is the thing; that

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Wagner did not try to write music, melody, songs, arias, etc., but that these are extraneous, and are used only to make impressions or to connect different parts of the drama. He speaks with scorn of the Italian operas, and can beautifully demonstrate on a piano the simple, silly structure of those operas. He says, "Gebildete Menschen gehen hie und da auch noch in derlei Vorstellungen, aber nur noch selten." I learned a lot from him about music and about impressionism, symbolism, and the other modern art currents.

There were no other first-rate people on board, but a lot of nice, pleasant "Dutzendmenschen." My neighbor at the table was the ship's physician, a fine fellow named H., from Meissen, whose eight direct ancestors were clergymen. He is a very well-informed man, who can hold his own anywhere, and who is up in modern surgery, having been assistant at Leipzig and at Dresden. He is quite young—"noch nicht aus dem Schneider." By the way, we played skat a good deal, and it is the best time-killer I know of. I advise you not to forget it entirely, but to play whenever you have a chance; it is the game of games, and, although all games "kill" time, you will find that this game can not be learned in three or six months, and that it always exercises the ingenuity and develops the acumen.

As to my health, I can say that I have no complaint, that I have all the functions in a normal way, and that I think I am about as well as most men are at 44. I have reached my normal weight, and do not wish to gain any more in that direction. I have taken the medicine as you directed up to the present writing, and shall continue to do so one more day, and then I will try to get along without it. In case I need more, I suppose I will have the indications and will follow them.

More from St. Louis. I will have to stop in New York or Hoboken one day. My love to all.

Affectionately yours,

A. C. B.

Augustus Charles Bernays

ST. LOUIS, September 28, 1898.

Dear Thek:

I arrived here Friday evening last, and have been busy ever since. Have operated four big cases. The work was well done—up to my best form. I mention that because you would be surprised to hear the stories that have been set afloat here about me—that I had a cancer; that I would never return; that, if I did return, it would be found that my hand and head would not work properly, etc. People look at me and are astonished, and tell me that they had heard that I had gone to Zürich to have my stomach taken out, and similar stuff.

I am in splendid health, and never felt better in my life. I found business matters in pretty good shape, and have begun to make money. In a month or six weeks my debts will be paid up, and then I can begin to lay up a few dollars for future use.

I have a notion that my sickness will in the end prove to be rather of benefit to me than of harm. I am compelled to lead a more quiet life, and I find that I can do so. My friends in the profession are sticking to me, and those who have had others to operate for them during my absence are the ones who are most glad to have me home again.

I look so well—really better than I have looked for years—and they all see it at once, and are quick to appreciate the value of the healthy appearance that I have. Kelsoe came to see me, and was pleased to see that I was well.

I have not seen G., nor Miss M., nor the H.'s, but no doubt will see them all in a few days. Waldemar Koch came in to see me and wanted Walter's address. I gave him No. 8 Via San Basilio, Rome. He says he has found a new compound, and his name is mentioned somewhere in chemical annals. That is what I want Walter to get. I wrote to aunt Helene, as you suggested. Write me your address from Flor-

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ence, and write some articles for the *Westliche Post* and the *Globe-Democrat*.

I came home from New York in the same sleeper with Mr. H., of the *Globe-Democrat*. He expressed himself as well pleased with your contributions. He is the general manager and boss in the *G.-D.* office. What he says, goes. It would have been a good scheme for you to have been in Paris. I rather think they would like some one to send them daily telegrams from the proceedings of the Peace Commission in Paris. You might have been duly accredited by letters to the gentlemen composing the commission, and, being able to speak French, which most of our men can not, it would have been a fine position. This matter can possibly be fixed up yet if you write at once about it.

Yours always,

A. C. B.

Clem and Charley are O. K. The house is in good order. Rosie had given it a good cleaning up because she had expected you to return with me.

In Zürich, just a year after our arrival there, and while I was with August at the near-by mountain resort, Tantele died, aged 75. She had been ailing practically all her life, and only the hot-house plant life she led preserved her to the ripe age which she, who had not been expected even to reach adolescence, after all attained. The lovely Zürich spring, her last on earth, she had enjoyed in her own quiet way, but afterward, during that cruel, wet, chilly summer, with August so ill in the house, it became

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evident that she was failing. The chronic bronchitis which had racked her small body all her life, night and day, and finally bent her poor back very much, gave her hardly any respite. Still, the young Swiss doctor who had treated her ever since we had arrived in Zürich, and for whom she had conceived a real fondness, assured me that there was no immediate peril, and that I might accompany August to the Rigi. I had, indeed, no choice in the matter. So, leaving conscientious Walter in charge, we departed, with strict injunctions that I was to be summoned in case of an alarming change. The telegram announcing that the end was approaching came late in August. But death, at the last, was mercifully abrupt, and before I could reach her from the near-by mountain she had breathed her last. She also was reduced to a handful of ashes, which Walter soon after placed where reposed those to whom her devotion had belonged for the greater part of her altogether loving life—in the grave of our parents at Heidelberg. With her was severed the last link that bound us intimately to the previous generation.

The winter of 1898-'99 scattered the European part of the family. Eric was placed in a Swiss boarding school, Walter went to Heidelberg, and I carried out a long-cherished plan of spending a

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winter in Italy. April, 1899, saw me speeding home, however, to see for myself whether the clean bills of health I was receiving from the Doctor were in no wise exaggerated.

He was, indeed, stronger than ever, a little too heavy perhaps, but full of life, and rejoicing in the plenitude and success of the work that came to him, full of plans and hopes for the future. He had promised to attend a medical convention in Portland, Oregon, in June, and thither for a fortnight he went. There he read his paper on "Pathology and Therapy of Cancer, with Special Reference to Cancer of the Stomach." From the conclusions arrived at in this address, delivered twelve years ago, there is, I think, little dissent at present. There occurs in it a paragraph which I wish here to reprint in order to show fully his position on this momentous question, as well as to silence those who still idly and cruelly repeat the foolish talk about his callousness and lack of proper sympathy with the suffering of his patients, and who still dwell on his "unwarranted" intrusion into sacred domains of the body. He said:

What to one surgeon might appear inaccessible might to another be perfectly within reach of the knife and scissors. Only he who has seen good results follow extensive and complete extirpation of whole regions of the body, large parts

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of the intestinal tract, etc., will have the inclination to do this line of work.

Each surgeon soon learns the limitations of his skill if he is convinced of the usefulness of extensive extirpations of cancerous growths. Every once in a while he will have a facer when a patient dies of shock following one of his efforts to save a life. Deaths of this kind remind us of our limitations in such forcible and persistent manner that we are made to feel the responsibility of greatly endangering human life, even when that life is tainted by a destructive cancer. I remember at this moment some sleepless nights spent in going over and over in my restless brain the steps of a fatal operation, trying to find in what detail of the work I might have acted differently, perhaps better; how I might have saved the patient a few drops of his impoverished blood had I acted otherwise; how it might have been better if perhaps no morphin had been injected before the anesthetic was given. Thus a thousand more or less fantastic ideas rack one's brain, keeping away sleep, while the body is tossed from side to side, until, the problem still unsolved, sleep finally comes to the relief of the exhausted organism. A few nights of this kind will dampen the ardor of even the most enthusiastic operator, and, unless nature has fitted him for the work by giving him strength, and such nerves and organs of sense as will enable him to stand the strain of hard work in the daytime and a sleepless night now and then, he will abandon surgery and devote himself to some other line of work in the profession.

On his return from Oregon the Doctor accompanied me back to Switzerland, where, at Adelboden in the Bernese Alps, we went to a family meeting. This was interrupted by the Doctor's journeying to Roncegno, a Tyrolese resort on the Italian border, to see and give an opinion on a strange case of

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illness in a relative. Finding himself so near the land which I was never weary of praising, he crossed the border in the merry company of some German cousins, and at Venice and on colorful Lake Garda received impressions so strong and deep that he was ever after most eager to renew them, as well as to extend his acquaintance with that fairest and most entrancing of European countries, Browning's lady-land.

In September we separated once more, the Doctor going home, after persuading me to spend the winter in Berlin instead of following my own inclination for more of Italy.

CHAPTER XVI

SOME HABITS AND TRAITS

Give me a good laugh.—*Walter Scott.*

Knowing what people read and how they read gives us precious and delicate hints as to their character and conception of life.—*From the French.*

The Doctor loved to read reclining at full length. He seemed to relax best that way and economize strength. Every evening he would collect what medical literature he needed for his "lesson," as he called the next day's work, as well as what fitted in with his mood to afterward go to sleep on. His reading was scarcely exclusive of any human interest. The latest novel, if it had vitality and personality, German or English periodicals, and the latest essays on science, economics, sport, finance, art, philosophy, would find themselves piled up on one side of his big brass bed, together with medical literature. He always read himself to sleep, and never by any chance turned out the light. If, once in a long time, I failed to go to his room after he slept, the morning would find his face doubly illu-

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mined by the artificial as well as the natural light streaming into the room, where the shades were never drawn.

New and virile thought, original presentation, a lucid and forcible style, were the qualities he prized most in a writer. For fine writing, and the tenuous and finical in thought and sentiment, he had not time nor inclination. He tried only once to penetrate to "darkest Henry James." Twice he attempted Edith Wharton's "House of Mirth" and twice abandoned it. Theme and treatment of this and similar books seemed equally negligible in his eyes. The long-drawn and losing fight of a feeble fetish worshiper against the fetish she knew in her heart to be such — the inanity of the exhibition in contrast to the stern and awful realities of his life work — wearied and bored him.

The young Kipling made immediate appeal to him. It was the tremendous vitalizing force in the man that made the Doctor feel him as kin. His gift of endowing animals with qualities similar to those of men, as in "The Maltese Cat," "The Walking Delegate," "The Jungle Book," delighted the Doctor, as did his masterful way of creating an atmosphere. His humor, his original and bold use of slang, his expert handling of and his desperate expedients in situations of danger to life, limb, and

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reputation, stirred my brother's imaginative sympathy.

He was keenly alive to the beauty of Oscar Wilde's diction, and to the piquancy and polish of his phrase. No less was his joy in the paradoxical and quizzical contrariness of Shaw. He was fond of epigrams, and would not admit that many of them failed by overstatement or limped by striving for effect, regardless of truth. Perhaps he felt, with Goethe, that he had enough of the problematic within himself, and liked only listening to the opinion of another if it were positively expressed. He himself coined aphorisms with pleasure, and often happily.

When he most needed diversion he read German novels and sketches. Heyse, Fontane, Sudermann, and Helene Böhlau brought back to him scenes and environments he had known in his youth. For the same reason he loved Otto Erich Hartleben, the perfect workmanship of whose prose and verse contrasts so curiously with the career of this strange citizen, who, impeccably born and most carefully reared, lived and died ever on the outskirts of Bohemianism — *der ewige Student*.

Eckstein's solitary bull's eye, "Im Carcer," he read innumerable times. To every one it is howlingly funny the first time it is read or heard. If

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well recited, it can be endured a second time. But the Doctor, one hot summer, carried "Im Carcer" in a Reclam edition in his coat pocket, and for a number of consecutive evenings, as the family got comfortably settled on the lawn after dinner, he would bring it forth and begin to read it aloud. We enjoyed it once, and relished his enjoyment of it a second, and even bore with it a third time, but after that, when he tried to inflict it again and again, we rebelled and proceeded to muzzle him. For a fortnight he persisted in his attempts to make us swallow the dose, laughing until he bent double — partly at the story, but still more at our indignation and denunciation of his tantalizing pertinacity. Tantele was especially emphatic in her protests, and scolded him in exactly the tone she had used when he had been a naughty little boy in the long ago of his Lebanon boyhood, which, of course, threw him and the rest of us into renewed spasms of mirth. He was always a good laugher. As one of our household expressed it, "He would see the point of a story instantly, and always laughed most heartily, but an anecdote he himself was telling never seemed finished to him until he was convinced that even the d—est fool in the crowd saw every possible bit of humor in connection with it. But one who did not love him as we did could hardly appreciate

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how funny it was to us to have him draw a diagram, with bits of the story repeated, for illustration."

Full many an anecdote did he mangle in the telling that way, or by laughing before his auditors got a chance to do so, or, still worse, by going off into a dream in the midst of it, with the threads all dangling. He was too good-natured to mind our side remarks, interjections, and aspersions abundantly cast on his delinquencies as a raconteur. Often he would think of an anecdote just as the roast or fowl was brought in and placed before him to be carved. He was an artist at carving, if not at story-telling, and many a time, when there were guests and he would pause, knife in air, to begin a tale, significant imploring looks and emphatic little kicks under the table would be aimed at him, trying to make him desist — rarely with success.

He enjoyed and would tell a joke on himself, utterly oblivious or careless of the light it threw on his own infirmities and offenses. He once came back from a visit in California, where he had made acquaintance with a seven-year-old nephew, whom he described as a "perfect little Lord Fauntleroy, punctilious in his grammar and fastidious as to his manners." When the Doctor, coming into his sister Lily's house from a walk one day, threw himself,

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with a carelessly worded question and without removing his hat, into a chair, this boy, in a scandalized stage whisper was heard to remark, "Mamma, Uncle August keeps his hat on in the house and says 'ain't.'" He gleefully repeated the reproof he got from the child, and enjoyed the humor of it, without seeming in the least to mind that it cast an unenviable reflection on his own decorum.

Naturally he did not draw the line at the broad or perhaps even at the unseemly and coarse in humor. The medical profession for obvious reasons rarely does. I have been shown a printed document, said to have been written by him, and smuggled by a humorous friend who was secretly in sympathy with him into the very precincts where the St. Louis Medical Society was holding one of its farcical and owlsh "Vehmgerichte" over some member so lacking in temperament as to submit to the medieval rite of being "investigated" for violation of the code of ethics. The document is not merely Shavian, but Rabelaisian, in its reckless and riotous irony, in its personal handling without gloves of every "big bug" of the solemn set, in its calling every spade a spade, and in its playing high jinks with each man's pet panacea, darling vice, or absurd shortcoming. It holds the whole institution up to ridicule because of its unscientific at-

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titude, its ignorance of modern progressive methods, the reduction of its members to the absurdity of mutual admiration, its blinking contentedly over the tallow-candle achievements of its slow and sleepy leaders in the guarded twilight of their code of ethics, when outside there blazes the great and glorious sun of free science.

A reproach frequently addressed to him was that he had not tact. If tact is the faculty of saying the right thing to the right man at the right moment, like most honest men he had it sometimes and lacked it at others. Often it showed itself in him in so subtly refined a form that it escaped the grosser senses of the multitude. With the delicacy of a sensitive woman, he could, at the crucial moment, do the exquisite thing that soothed, perceiving a hurt that others did not see. How often he laid a rose-leaf on a cat's scratch or on a hat-pin prick disloyally, maliciously inflicted on me! But tact, in the sense in which the word is employed by the social climber, he assuredly had not. He was obtuse even to the glaring truth that the sense of humor is a movable feast, which never coincides with wounded self-love. Several people have told me since his death how he forfeited the good-will of a multimillionaire, whom he genuinely liked and admired, by obliviousness of just this fact. It

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seems that he approached this magnate one day in public, and related with greatest animation and gusto how that morning he had amputated a poor fellow's leg with such skill and dispatch that the patient lost scarcely a teaspoonful of blood. Then, with entire and cheerful confidence in the multi's seeing the point from the right angle, he added, "What a pity it was a poor man's leg! Now, if it had been yours, Mr. —, I might have charged \$20,000 for the job."

As if a multi necessarily enjoyed seeing his sacred person and almost equally sacred bank account mutilated to the greater glory of a rising young surgeon!

After his death one of the numerous obituaries that appeared, speaking of the idiosyncrasies of his character, accused him of this fault — tactlessness — and attributed it to his bachelordom. Have husbands a mortgage on tact? Not that the chastening and subduing effects of matrimony are to be denied, but, like all other educational devices, it can but build on a foundation found. The Doctor lacked the organ for the conventional distinctions. He was and always remained an *enfant terrible*, who saw and admitted some of his blunders after the fact and went forth and committed others. Seeing all men equal before death and disease, seeing them all prone to indulgence that entails suf-

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fering, and many of them sore afraid and most unheroic under his care, tended to obliterate the artificial props with which humanity holds up its dignity, made him oblivious or scornful of the rags in which this "virtue"—so superfluous in his eyes—parades. A man with his power, magnetism, self-confidence, with the crash in his ears of the idols he is helping to fell, is never at the same time a diplomatist, adjusting his mantle to the wind. Of the tact that is a species of cowardice, a desire to leave doubtful things in a tepid obscurity, where the microbes of authority breed best, he was indeed innocent. If matrimony could have provided him with that species of tact, made of him a man fearing to speak his mind, if it could have degraded him to the rank of the good provider—the tame cat about the house, the anxious soul that hides his conviction lest he make enemies—then I am glad he never married. After all, the wife that remains an inspiration to her husband is a rare bird. The anxiety for the nest and the nestlings—if not the desire for social prestige—makes her reluctant to enter heartily into the spirit of his work, and unwilling to let him pay the terrible price of independence. The greatest thought of the world and its most daring and far-reaching action has

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been accomplished by men free of the yoke. *Vita conjugalis altos et generosos spiritus frangit et a magnis capitationibus ad humillimas detrahit* is still true.

Half in jest and half in earnest, many of the doctor's friends laid his celibacy at my door. He sometimes teasingly supported the suspicion they expressed — that I made a pleasant home for him from the selfish motive of keeping him from marriage. Yet, excepting in one instance, when my father earnestly besought me to dissuade August from an alliance he seemed to be contemplating, I never interfered with his attentions to any lady. In that particular instance I acted on my father's urgent solicitations. Sufficient to say that August, later, was supremely content that he had escaped that particular yoke. Only in the negative sense, inasmuch as I never engaged in match-making, can I be made answerable for my brother's failure to marry. To assume in a measure the mask of destiny, and claim a foreknowledge of soul affinities, is a species of arrogance with which nature has not endowed me.

Certainly he was no misogynist, as he was sometimes called toward the end of his life. No man less than he. He simply did not take the time to

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go a-wooing. In his younger days he used to say that he would some day marry on the spur of the moment, and bring home his bride to take her place at the family hearth as it stood, garnished with sister and brothers. I do not believe he ever actually put the question that way, but, if he did, I can not blame the lady he may have addressed for spurning an offer so qualified.

Perhaps the loss of such good material for a husband was deplorable, inasmuch as he left no progeny which might have inherited his talents. Perhaps the restraining influences of wife and children could have quenched his love of excitement and thus prolonged his life and usefulness. Perhaps! Yet, if he had had other domestic relations, his "tact" might have been developed at the expense of his originality, power, and genuineness.

Bluster and brusqueness were sometimes assumed to tide him over emotion he did not care to show. The less a person amounted to in the eyes of the world, the more careful and gentle and sparing was he. With stupidity and clumsiness in his own profession he did not have much patience, it is true—that exception to his tolerance proceeded from intolerance and zeal in the interest of the many. He hated to see a would-be surgeon constitutionally deficient in dexterity, or painfully near-

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sighted, or slow in his mental processes, and he had no hesitation in saying that men so scantily favored by nature encumbered the profession.

His vivid imagination supplied him with the rarest tact — that of putting himself in the place of the suffering and their family — and spurred him on to do as much good as was possible, even though his motives were subject to misunderstanding.

To operate in order to give temporary relief and the semblance of betterment in a well-nigh hopeless case, especially to secure for a mother a respite and a hope, a brief improvement in the condition of her child, he considered his sacred duty, though to refuse such cases would have been sparing of his reputation and merciful to himself.

It was generally conceded that Dr. Bernays had humor, and as generally charged that he had no tact. Yet, as I see it and as I have endeavored to explain, he had tact in its most sublimated form where it was most needed, had it where it supported and supplemented his highest ideals, had it where it benefited others, though it harmed himself. He used to say that he was his own worst enemy, by which he meant that he lacked the smooth, conciliatory, serpentine manner, the tact, that saves its own skin, ever tacking and veering, bargaining with and dodging around cold facts. When it came

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to the Doctor's master passion, as is shown in the anecdote of the multimillionaire and the amputated leg, he even lacked humor, forgetting to put himself in the other man's place.

CHAPTER XVII

THE YEARS 1900-1904

A man behind the times is apt to speak ill of them on the principle that nothing looks well from behind.— *O. W. Holmes.*

Show me the man you honor. I know by that symptom better than by any other what kind of a man you are yourself, for you show me what your ideal of manhood is, what kind of a man you long to be.— *Carlyle.*

Berlin, in spite of the Doctor's preference for it, failed to hold me. It gave me sore eyes in more than the merely physical sense. Late in January, 1900, I fled to Rome. Hardly arrived there, I received a letter from the Doctor with the startling announcement that he was going to South Africa in charge of an ambulance corps for the care of the wounded Boers. He had insured his life for a large sum for my benefit, and had obtained permission from the insurance company to engage in the venture. Clippings from the papers of February, 1900, mention Dr. Thomas O'Reilly and Mr. Adolphus Busch as the promoters of the undertaking. There seems at first to have been so much enthusiasm on

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the subject that my brother was sure all minor details could be arranged. Dr. O'Reilly, always one of his staunchest friends, is quoted as saying that "the St. Louis ambulance corps would be superior to that of any other that was going or had gone to South Africa, inasmuch as it would be in charge of the greatest surgeon this age has seen, only the famous Robert Liston comparing with him in skill with the knife." The project was not, however, carried out, the secretary of the committee, Mr. C. Moloney, wrote me after the Doctor's death, "for the reason that, while the British had established supply camps on our soil without interference, the dominating party in this country, though indifferent at the time to the shipment of mules and munition of war to the British in South Africa, was not willing to permit the violation of the neutrality laws of the United States even for the freedom of the Boers."

The Boer cause, in spite of the fact that England, where my brother had many friends, was the adversary, aroused the habitual sympathy he entertained for the under dog. It was thoroughly in keeping with his temperament to espouse a forlorn cause. He burned to right the injustice of the insufficient equipment for the care of their wounded from which the Boers were suffering, whereas their

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rich opponents could give every comfort of camp and hospital to their own unfortunates.

In every struggle that took place during his lifetime his heart went out to the side which made for larger liberty, which had in it the elements of ultimate progress, however inexpedient the fight for these ideals might seem at the time. The manifestation itself and the feeling that prompted it was a step in advance, and there was glory and satisfaction in battling for big things. He could seem cruel as nature herself when he foresaw and gloated over the downfall of a party or nation that stood for prejudice and tyranny, and he could be a Don Quixote in his chivalrous championing of an ideal or a gladiator of the *morituri*, saluting with fine scorn some temporary emperor who, victorious, was beaten in the spiritual sense.

Jubilant over the result of the Japanese-Chinese war of 1895, he knew a few years later that the onmarch of invincible evolutionary forces doomed Spain. He was one of the few who saw in 1904 that the colossus Russia, in hypnotic myopia, was mistaking its own clay feet for a solid foundation, and that the great empire would totter before the nimble modernity of the little yellow people, who had been quick to adopt and adapt from every nation of the Occident what the special genius of each

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had evolved in political, strategic, industrial, and scientific endeavor. Shortly before his death he was watching with eagerness the internal struggles caused in France by the transfer of education from the hands of the clergy into those of the civic authorities. The temporary hardships and the incidental injustice such a huge readjustment entailed he felt as the necessary accessories of the change which the present generation had to bear, so that medieval forms of education need not be inflicted on future ones. Large-hearted and wide-viewed always, he truly lived up to the words of his brother-in-arms, Robert Ingersoll, whom he had personally known and greatly admired — words that, under the heading, "My Creed," printed in large type, he had had framed and hung in his bedroom, where night and morning his eyes first fell on them. These are the words:

MY CREED.

To love justice, to long for the right, to love mercy, to pity the suffering, to assist the weak, to forget wrongs and remember benefits; to love the truth, to be sincere, to utter honest words, to love liberty, to wage relentless war against slavery in all its forms, to love wife and child and friend, to make a happy home; to love the beautiful in art, in nature; to cultivate the mind; to be familiar with the mighty thoughts that genius has expressed, the noble deeds of all the world; to cultivate courage and cheerfulness, to make others happy;

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to fill life with the splendor of generous acts, the warmth of loving words; to discard error, to destroy prejudice, to receive new truths with gladness, to cultivate hope; to see the calm beyond the storm, the dawn beyond the night; to do the best that can be done, and then to be resigned.

R. G. INGERSOLL.

Dr. A. C. Bernays.

Acute and original mentality, combined with courage and combativeness, attracted my brother irresistibly. Wherever he found these traits—whether in long-dead heroes and martyrs to causes of enlightenment, or in personages of his own time (Ingersoll, Henry George, Bryan, Harden, Reedy, Meriwether)—he fraternized with them and gloried in them. The sympathy he had for these comrades-in-arms broke out on the oddest occasions and took form in the strangest manifestations. Whoever used poetry like Shelley or the drama like Ibsen, Wilde, Shaw, and the modern Germans, or philosophy like Schopenhauer, Nietzsche, Spencer, as battering-rams against ignorance and vapid authority, was brother and friend to him. More than that, he was given a niche in the spiritual Walhalla the Doctor had constructed in his soul for warriors that had died in seeking and defending his holy grails—scientific truth and liberty of thought and word. According to rites of his own, invented on the impulse of the moment, he figuratively

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burned incense before the effigies of these when he came across them. As once when we were in Rome together. It was in the early autumn of 1905. There was to be an illumination of the Coliseum with Bengal flames. I had seen the spectacle before, and thought the wonderful light effects in the great ruins would delight him. To my surprise, he refused to accompany me, and arranged that I was to go with some chance acquaintances. About the disposition of his own evening he was most mysterious, and not until months afterward did he divulge how he had employed it. There stands in the Eternal City, amidst its five hundred churches, not far from one of the papal buildings (Bramante's famous Cancelleria), in the Campo de Fiori, a statue of the renegade Dominican monk, Giordano Bruno, who dared to think and to speak out his thoughts in opposition to the beliefs of the church, who refused to recant what he knew was truth, and for his heterodox opinions and teachings was burned at the stake on that spot in the year 1600. On that September night the Doctor engaged a cab for several hours, and, after having had a number of the sordid little Italian bills changed into still more sordid and less commodious coppers until he had a hatful of "soldi," he drove from the Hotel Quirinale, where we were stopping, to the Campo

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de Fiori. He had not much Italian, but he managed to instruct the coachman as well as to interest him in the private homage he had come to do his hero, "a great, a very great Italian." Arrived near the statue, they collected at first a small knot of street urchins and what other loungers they found in the piazza, and induced them by means of "soldi" to shout at the top of their voices, "Evviva Giordano Bruno!" Soon more people, attracted by the hubbub and noise, gathered to find out what was going on. They saw an "Americano" standing up in a cab and throwing soldi among those who were shouting, "Evviva Giordano Bruno!" Concluding that he must be both "pazzo" (crazy) and "molto ricco" (very rich), they joined lustily in the cry. Conviction may not have had so much to do with their readiness to take up the slogan of the evening as lust of soldi, imitativeness, and the spirit of the mob. Enough—the crowd shouted this *défi* to Catholicism as long as the Americano desired such service. Several times the coachman was sent out for more change until at last the Doctor's thirst for martyr worship was appeased. Then, cheered by this little demonstration of his very own, he drove home and quietly crept into bed. It was with cordial enjoyment, equaling the childlike delight he evidently had felt in the little *festa* of his

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devising, that he used at home to relate the story of this serio-comic expedition. The telling of it was all the funnier for the babyish way in which he sounded the Italian words he was obliged to use that night. When he mixed his slight Italian freely with French and Latin, and pronounced his home-made words very carefully, it was impossible not to laugh. Once or twice he told it at Sunday night tea when there were guests, and there was vociferous hilarity, in which he joined. And yet, as I think of it now, there was in this action something touching and sweet, and something deep-rooted, that linked the philosopher, who chose to be burned at the stake rather than revoke, to all that was noble and strong and great in this life — linked it to his own undaunted will to know, to reveal, to serve scientific truth at any cost.

We traveled a great deal during the last ten years of the Doctor's life. Usually I went with him, and usually our voyages were to Europe, where we revisited the old haunts or made acquaintance with regions we had not known before. Germany continued her upward progress. Politically, industrially, economically, the Doctor saw his grandmother country change from the poverty, simplicity, and humility which were formerly her distinguishing features to a position of wealth, impor-

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tance, and pride, disputing the hegemony with Albion herself. In his heart of hearts he attributed the leadership she was winning to her devotion to, her preëminence in science. He gloried in this triumph of his religion. Science to him included all possibilities. It had the true idea of eternity because it proclaimed the constant flow and interaction of living forces—evolution. It set up no truth, no revelation from man-made supergod to demigod or superman, no creed that in its very arresting of development contained the germ of death, but taught a gradual unfolding of life forces which, even in destroying, build up and make for growth. Germany, he felt, had during his lifetime contributed more than any other nation to the recognition of the laws that underlie this eternal becoming. That he had been an eager worker in the band which had given spirit-liberating science this tremendous impetus was his chief pride and glory in living. With the mixture of modesty and consciousness of worth that was one of his most interesting traits, the last sentence of the will he wrote on May 12, 1904, the day before we departed for Japan, reads:

In closing, I will say that I have not done as much good on this earth as I might have done, but I feel and know that many pupils and many other persons with whom I have been

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in close relations, as well as the science and art of surgery, have been promoted by my work.

A. C. BERNAYS.

Modest and proud at the same time I call this sentence, because it does not even mention the practical and direct service to thousands of sufferers who owed him life and health, but dwells only on that part of his work wherein lies the promise of immortality—his teaching and his promotion of surgery. Yet, to others such un-Saxon unreserve as this is hateful, and the Doctor was frequently censured for his “egotism.” A string of stories illustrative of his naïve expressions of self-esteem are current. One contributed by Dr. Bartlett is typical. “Shortly after I had become his assistant in 1893, as we were driving home one day after performing a difficult operation in which I had helped him, just as we were turning into Vandeventer Place, he said, ‘Bartlett, you’ll make a surgeon.’ Then, after a moment’s hesitation, ‘but you will never make a surgeon like Dr. Bernays.’” But no man was freer than he from envy and jealousy, and none readier than he to acknowledge signal distinction. Neither was it lukewarm, half-hearted approbation he gave. On the contrary, he lavished unstinted, almost immoderate, admiration in accordance with his exuberant and impulsive

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nature. If, as La Rochefoucauld says, "it is a sign of mediocrity to praise with moderation," then, conversely, to commend unmeasuredly must be an indication of height of personal attainment. During his last years, when he knew himself to be failing in health, instead of looking askance at "the generation that was knocking at the doors," this master builder opened wide to it all the entrances and opened wider his arms and his heart. Most lovingly he welcomed, and praised, and pushed those of his own school who were forging to the front, and to the day of his death shunned no trouble, grudged no time, spared no effort to help and advise them. But he did not stop at his own intellectual brood. His efforts to promote science and to spread the knowledge of the work best calculated to help in this endeavor extended far beyond the necessarily limited circle of those he had himself trained. Several times, in the years immediately preceding his death, he made a special pilgrimage to St. Mary's at Rochester, Minnesota, the stupendously systematized creation of the Mayos, and he was untiring in his private and public encomiums on this institution. One of his last articles, written for the *New York Medical Journal*, was to describe and praise the methods of the Mayos, their hospital, their equipment, their successes; to praise them

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without stint, to glory in their services to humanity and to science, as if they had been triumphs of his own.

In his professional work he showed himself always willing to immediately test the methods invented by a brother surgeon, and to adopt and teach them if he found them advantageous or meritorious. In corroboration of this trait of his, I cite two short letters from eastern colleagues. Under date of December 1, 1899, Dr. Maurice H. Richardson, of Boston, wrote:

Dear Dr. Bernays:

I have no finished reprint of the paper on "Acute Abdominal Symptoms Demanding Immediate Surgical Interference." They called for the paper for the "Transactions" before I had an opportunity to revise it. I have some reprints of it as it appeared in the "Transactions" of the Maine Medical Association, and I will send you one of those. I feel very much flattered that you should ask for it.

Yours sincerely,

M. H. RICHARDSON.

Inclosure.

Exactly two years later Dr. Howard Kelly, of Baltimore, says:

1418 EUTAW PLACE, December 1, 1901.

Dear Bernays:

I send you reprints for more convenient reference. You are wonderfully quick in the uptake, and there is no danger of your becoming fossilized this decade.

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I appreciate, dear Doctor, more than the kindly courtesy of your letter, the generosity of spirit which enables you simply and frankly to take something from the hands of another, and to say that it is good and use it.

No, the nearest combination I know of is the "artificial menopause."

Very sincerely yours,

HOWARD A. KELLY.

Far from him, indeed, was the possibility of falling into old fogysm. He took as he gave, frankly and gladly, knowing well that it takes the combined strength of many to make a perceptible advance into the deep, dark territory of the unknown. The bewailing of the "good old time" was always provocative of a smile in him. His modernity to the day of his death was one of his salient intellectual qualities, and this belief of his in the constant advance of humanity extended far beyond the confines of his own particular vocation — to the very outposts of human endeavor. Never did he recede from his enthusiasm for originality and intrepidity in thought and action. With unerring intuition he recognized the vital departure that was destined to live — distinguished between the passing fad and the movement that had come to stay, between the fakir and the hero. Endless is the array of the journalistic, political, literary, artistic lights which he hailed on first appearance, and, despite the persistent war

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made on them by carping criticism and lagging spirit, stood by them — sometimes, after years, to see his instantaneous judgment accepted. Outward advantages never blinded him, and neither did social disadvantages, nor yet concomitant ethical shortcomings, prejudice him against real merit. Whether a man was Jew or Gentile; white, black, or yellow; whether he drank or gambled, or otherwise overstepped bars put up by convention, if he in any way furthered the world, such activity gave him value as a member of human society, and that value the Doctor believed in acknowledging.

Though catholic in his taste for art, the modern movements had his supreme sympathy. The impressionists, *plein-airists*, secessionists, he studied and appreciated with tremendous gusto. Whether it was Böcklin, Segantini, or Rodin — whoever brought out a point of view in art, whether of conception or technic hitherto hidden or unheeded, fascinated him. A newness that was mere eclecticism, weak compromise, something neither hot nor cold, he waved aside with his accustomed smile of derision for feeble treatment. He was radical — the born surgeon — in all things, and knew that onward in art, in politics, in ethics, meant just the same as in science — cut away the diseased and the decaying, remove every cell that is not fit to live,

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or else it will encroach on and poison the whole organism.

In 1903 Dr. W. V. Kingsbury of Butte, Montana, persuaded my brother to tour the National Park with him and Dr. W. O. Campbell. The three drove through the park in a surrey, taking a negro servant with them to attend to the making up of the tent and the cooking when they camped. Dr. Kingsbury, one of the Doctor's early assistants, had always remained a favorite because of his whole-souled, life- and laughter-loving disposition, that chimed in with his own, as well as because of his natural dexterity in their mutual profession. My brother enjoyed the grandeurs he saw, and never tired of telling of the fun he had in the Kingsbury home with his friend's three healthy babies that were growing up naturally in the broad, free western lands. He came home enthusiastic, and was planning another trip to include me. But this and other plans were rudely crossed by the cruel and unflinching hand of disease and death, which was even then stretched out to crush that life that was so enamored of life.

Only about two weeks after his return from the Yellowstone, August, after having taken a Turkish bath, was suddenly stricken with illness, due probably to the rupture of a small vein or artery in the

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brain. He was attacked by violent fits of vomiting, alternating with loss of consciousness. His assistants, in their dismay, did the little they could, sending first for our youngest brother, Walter, then the city chemist, with offices near by on Eleventh and Chestnut streets, and afterward for me. Walter and I took him home as soon as we could to the residence at Laclede avenue, where he was attended by Drs. Summa and Barck. There was a slight paralysis of his left leg and some difficulty of speech for a short time. These, however, soon gave way to the absolute rest the physicians ordered, together with total abstinence from even slight stimulants. After three or four weeks he was up and about once more and resumed his work. At times, especially after the rest and change of vacations, which became after this *memento mori* more frequent and of longer duration, he felt refreshed and in as good form as ever. Yet, in spite of that and of the cheer and hope his devoted friends tried to give him, he was too keen an observer, too thoroughly conversant with the various forms of functional decay and disease, not to know that his days were numbered. He kept up a bold front for the most part, rarely giving way to outspoken despondency, but at moments when he believed himself unwatched there was often thereafter a sadness

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and a wistfulness about his face which betokened that he was aware he walked in the valley of the shadow of death. This expression of intensity and absorption is caught with a gripping force in the large photograph Strauss took of him that winter when, just convalescent, he wandered into that artist's studio one morning. He left the photograph at Strauss', asking that it be sent to me after his death, and I, indeed, never knew of it until he slept the eternal sleep. It is a triumph of photography rarely achieved — it seems almost to live, and painters who see it are invariably seized with an irrepressible desire to add to its marvelous semblance of reality the farther adjunct of color. Thus far I have resisted their blandishments, fearful that, instead of adding to its almost breathing likeness, some false note be struck, which would alter and destroy its penetrating forcefulness and verity.

The band of those who had seen his work at close range, who had heard his lectures, who had been assistants to him, had grown large and strong. It was a loyal band, and grateful and proud to have served under him, glad to acknowledge his many acts of kindness, anxious to proclaim his prowess. Instances of touching devotion from many of his followers were frequent. One way they had of honoring him was a source of recurrent

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pleasure to him. It was the naming of their first-born after him. Every now and then he would receive a letter, often accompanied by a photograph of a small unformed morsel of humanity, announcing in words of joy and pride the advent and the instant bestowal of the given name of Bernays on the little stranger in the household of a former student. I heard him say shortly before his death, "Well, if I myself have given no hostages to fortune, at least there are sixteen young American citizens who bear Bernays as a given name." Below is a letter from a friend of his youth which pretends to object to the naming of his first grandchild after the Doctor on religious grounds. The doctor handed it to me one day at breakfast with a smile at its quaint cynicism, masquerading as religious qualm, and I preserved it. As I do not wish to embarrass any one, it is here given with the names omitted.

Dear Doctor:

My son-in-law, Dr. —, has just been visited by the stork, which left him a fine boy, and he is determined to name the kid Bernays, after you. I told him he should hesitate a long time and weigh the matter well before bestowing the name on his offspring, as I had known you for many years, and know you to be a confirmed Pagan in your religious belief. I told him you did not even believe in the efficacy of the atonement, and I was afraid if he named the boy after you

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that he might grow up with the strange and dangerous religious beliefs in his head, but the Doctor seems determined to have his way about it. I think you would better warn him.

By the way, Dr. — has worked into a very fine practice for the length of time he has been here. He thinks you are the greatest surgeon in the world, and can not get done feeling grateful for your kindness to him.

Yours truly,

— — —.

CHAPTER XVIII

LAST YEARS

Life well spent is long.—*Leonardo da Vinci.*

When in May, 1904, it became evident that our Louisiana Purchase Exposition was not likely to be fully ready for weeks, my brother asked me one day whether I would go with him to Japan for a short stay in that island, at that time most interestingly engaged in its test of military power with Russia. He felt a little weary after the winter's work—the most successful from a financial standpoint he had ever had. Although he had apparently recovered from the slight stroke he had had in the previous autumn, he knew it to be the part of wisdom to avoid a long strain and press of work, and to obtain the complete rest and relief the voyage across the Pacific, to be made twice within a few months, would bring. So we departed on May 14th from San Francisco, touching the Hawaiian Islands for a day, and returning early in August by the same route.

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The temptation is great to recall at length the delights of this, our most delightful, voyage, but there is danger of transgressing all bounds in the joy of reminiscence. Though we visited only the northern part of the island, because the trains were moving troops and not always at the disposal of travelers, we saw and learned a great deal. We reveled in rickshawing, banzaiing the victories of the Japanese, observing, and purchasing. We were lucky, too, in meeting and making acquaintance with two Europeans who had intimate knowledge, by reason of having spent the greater part of their lives in Japan, of all that concerned the island and its inhabitants. The one was Mr. Basil Hall Chamberlain, the universally quoted author of "Things Japanese," the other Dr. Scriba, who had taught the Japanese nearly all they know about surgery. Dr. Scriba had preceded my brother as a pupil of Gustav Simon at Heidelberg by a few years, and was so delighted to get a chance to talk over subjects dear to his heart with a colleague, to whom mutual reverence for their teacher seemed so happily to bind him, that he came up to Miya-noshita, where we spent a little over a week viewing the beautiful Hakone district, and stayed five days—most of the time talking surgery to the Doctor. He did, however, vouchsafe also inside

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information on the subject of Japan and the Japanese, their morals, manners, art, habits, and views.

The Doctor never shopped so assiduously and happily as in Japan. We had to buy several new trunks for the purchases, and, besides, quantities of things were shipped directly by the merchants from whom we bought. I was loaded with presents of every kind and description, both ornamental and useful — household utensils, wearing apparel, bric-a-brac, and curiosities. Some of the beautiful embroideries and the lacquer and ivory ware we acquired are now in the Art Museum. For the rest of his life — not to be long, alas — the Doctor got much joy out of exhibiting the treasures brought and studying them himself, insisting upon the frequent use of the beautiful silverware he gave me, handling the precious little ivories, the prints, and the many tiny trifles for which he was constantly darting into shops at Yokohama, Tokyo, Nikko, and Miya-noshita.

The winter was passed in tolerable comfort at home, but toward February vague pains, as in 1898 — inexplicable, torturing — reappeared in the Doctor's shoulders. His blood pressure was extraordinarily, alarmingly high. We went to a southern

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resort in March, a move which turned out to be a dismal failure. Mere weather, supplemented by gambling in a straggling, ugly town, made up in equal parts of gaudy hotel and gaunt hospital, proved unmitigatedly depressing.

Twice more we crossed and recrossed the Atlantic ocean together, going far north to the Scandinavian countries and spending September and part of October each time in the region of the Garda lake and Venice, the rich coloring of which, the strange life, the charm lent these places by art and history, the Doctor loved as well as I. In 1905 we spent about six weeks at St. Moritz, where the Doctor seemed to recover his health and spirits almost as completely as he had in 1898 on the Rigi. He was the life and soul of a large group of interesting people we met in the little Hotel Belvedere, where we stopped. The charm of his alert and observing mind and his sympathetic manner won people of the most divers nationality, religion, station, and habit, and, when finally we drove away to Maloja and Chiavenna, the street in front of the hotel was blocked with those who came to see us off and have a last word with the Doctor. A long letter he wrote Dr. Graves describes his mood at that time better than could any words of mine.

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HOTEL BELVEDERE,

ST. MORITZ, August 14, 1905.

Dear Graves:

We were a week in Paris, a week in Brussels, two days in Heidelberg, and two in Zürich.

In Heidelberg I spent a day with Fürbringer. He was simply so glad to see me that he would not let me go—kept me all the first day with him. Next day he called at our hotel and spent a charming hour with Thek and me.

He remembers you well, and thinks well of your powers for work, but I was much grieved when he told me that you had said I was a wreck and all done up by diabetes. Of course, I understood that error, and Fürbringer said, "You need not deny that now. Ihr Aussehen strafft das Lügen." The fact is, I am almost entirely myself again. The new clothes Schmidt made me before I left home are all too small for me. I can not button them round my waist.

Now, one more thing I implore of you—that if you have told any one in St. Louis your opinion about me "confidentially," tell those same people that *you* were in error, that I was simply suffering from hypo or neurasthenia. The truth is, I was in the same condition after the affair of October 1, 1903 (referring to his illness of that time) as a man is who sustains a trauma, followed by what we were pleased to call Ericson's disease. A doctor having a hemiplegia and aphasia, ever so slight, must sustain such a shock, knowing the probable future. My attack of neurasthenia, or hypo, or depression, or melancholy, or all of them together—which now has passed, let us hope, forever—seems to me to have been less severe than some other cases of traumatic or shock neurasthenia. I have known them to last from three to four years in several cases.

Please tell all the doctors who may mention my name that I had a neurasthenia attack, and give your prognosis.

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My appearance will bear you out as being a splendid prognostician, as I look as well as ever. This altitude makes red blood corpuscles and does so quickly. It will be two weeks tomorrow since we struck St. Moritz. We shall stay three weeks longer, then a week of Venice, a week of Florence, then Genoa and home.

Thekla has written a letter to the *Westliche Post*. It will appear the Sunday before or after you get this. Show it to your better nine-tenths, and tell others who understand the lingo to read it. I have not read it, but assume that it will be in her usual piquant style, and will be interesting and fascinating. She is a trump down to her toe-nails, and no mistake. Few people realize what she has been to me and how she has contributed to my enjoyment of this earthly existence, which is the only one we can know anything about. *Après nous le déluge.*

I am invited to read a paper at the Brussels Surgical Congress, September 16th and 17th. I have sent the title, "A Final Word About the Treatment of Fresh Attacks of Appendicitis," to Kocher, who will preside. The trip to Brussels and back to Genoa will cost twenty-four hours, but I think it a good thing to do.

F. lost a fine son of twenty-one by suicide. The preacher called after the funeral on him and his wife, and told them "why God took his son away as he did." F. says that Christianity "ist nicht nur dumm, sondern auch noch gemein." "Gemein" in English means common, cheap, contemptible, low. This opinion is held by all who have examined the dogmas without prejudice. The post-mortem on young F. showed that many, perhaps all, of the organs were permeated by grip bacilli. W. also lost a promising son of between twenty and twenty-five by suicide. You see how wrong you were when you maintained in your salad days—at the time you were still a good Christian, before my father and I lib-

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erated your fettered soul—that infidels would not commit suicide. It is the cowardly believers who hesitate about doing what is best—not the infidels.

Give my love to all inquiring friends—particularly to Eycleshymer, should you meet him. Fürbringer knew of him and of his work. He is a fine fellow.

We are erecting a monument to Gegenbaur. I contributed, of course. The contributions are from 3 to 500 marks. I think the St. Louis University would do well to send a contribution and appear on the roll of honor. The money to be sent to Fürbringer, Heidelberg.

This place is beautiful—the jewel of the Alps. It is now *Hochsaison*—not a bed, much less a room, to be had. The place is full of golf and tennis players. America, England, and the nobility of all the European countries largely represented. Give my regards to your dear and devoted wife. Tell F. and others what you think they ought to know of this scripture. Believe me,

Sincerely your friend,

A. C. BERNAYS.

Toward me the Doctor became sweeter, gentler, more thoughtful even than before. How well I remember the night we embarked for home from Naples. We leaned long over the railing in the twilight, saturating ourselves with the gorgeous spectacle of the wonderful city built up from quays to hilltops, illumined at first by the setting sun, and then by its own lights and the torch of Vesuvius fitfully blazing forth in fiery figures against the dark sky. When at last I reluctantly tore myself away from the luminous spectacle and sought my

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cabin, I found it so crammed with boxes and packages that I could not believe it mine, though it bore my name on the card at the door. On examining the parcels, I found them gifts from the Doctor, consisting of gowns, embroidery, laces — woman's frippery. Things I had idly admired in passing, without a thought of coveting them, he had gone back for in the cities where we had lingered, bought them, and had them shipped. No other man I ever heard of could have noted, would have remembered, such feminine fancies. Never was there another such a brother!

Early in October we arrived at home once more, and the Doctor again went cheerfully to work. But the respite this time was shorter than before. The New Year of 1906 brought back distressing symptoms. Dr. W. W. Graves, one-time pupil and assistant and always friend of the Doctor, was consulted and promptly ordered complete rest. A rest cure was tentatively commenced, and had at least that psychical effect of giving hope which any energetic attempt to restore health is sure to have — for a limited period.

Work was strictly forbidden during this rest cure. But whoever heard of a physician implicitly obeying the commands of a colleague? My brother's mind would not stay inactive, and so he wrote dur-

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ing these weeks the little book called "Golden Rules of Surgery," which the C. V. Mosby Company published that spring. It gave him genuine pleasure thus to philosophize, indulge in reminiscence, sum up the enthusiasms of his life.

The little book is diversely rated. Its candor and directness, its conception of science as a religion, its intensely personal touch, make it seem much worth while to some. To others it is disappointing because of its brevity, and because the rules are in part taken from the work of the same name published by Hurry Fenwick in England.

The keynote of the Doctor's conviction of what books at best can profit the student is struck in the dedication of the book to Dr. Charles Mayo, "He teaches all he has learned in the only possible way one man can teach another — by letting the other see his work." He could have also quoted Walt Whitman, "To glance with an eye confounds the learning of all times." Then, it might be queried, why write a book on surgery at all? To that the answer is in my brother's own words, "The text book is a poor, but necessary, adviser to the student."

The ordinary text book becomes antiquated in a short time, and condemned to grace second-hand book shops, unless constantly revised and brought

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up to date. The Doctor at the time he wrote his book stood viewing life from an angle of eternity, and scorned to write of his master passion in a manner aloof, ephemeral, impersonal. Science was a continuous process to him, with many workers forging its links. Hurry Fenwick had formulated what was thoroughly established. This the Doctor, with his accustomed simplicity "of taking from another and calling it good," as Howard Kelly put it, accepted as the nucleus, from which to wander, he felt, would be supererogation. Only where his own experience varied from that of others did he alter the rules and add what was his own well-founded and tried opinion. More than half of the book is devoted to reminiscence, reflections, and practical advice to the young men in the profession. It is written with white honesty, from which not a syllable can be subtracted, nor yet a word added, without marring its effect. When it was finished he said, with the undying artlessness and the candid rejoicing in what was well done — whether his own or another's — that was his to the end, "It reads just like a novel."

Earlier than usual we embarked for Europe that year, and later than ever before — on the 1st of November — did we return. The Doctor suffered on the voyage across from fits of depression, and

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the chill and grayness of that European summer were ill calculated to have a cheering effect. Only toward the end of the trip did his mood lighten, and on beautiful Garda lake and in Venice and Florence we spent halcyon hours. The crossing home was the softest, balmiest imaginable until within a day of port, and the Doctor hobnobbed in his "friendly Indian" fashion with the motliest company that ever floated westward on a steamer — from the stately polyglot princess that daily breakfasted with him to the raw, western youth who returned more dazed than enlightened from his first European tour, and the Catilinarian journalist from Berlin who, embittered, was shaking the dust of the effete monarchies out of his frayed and faded clothes.

As usual, the Doctor was at first sanguine after reaching home, and remained seemingly convinced for a long time that his condition was materially improved. At any rate, he decided that it was best for him to dwell as little as possible on his ailments, both because of the direct effect of the thought on his condition, and also because of the reports so readily circulated with regard to his failing health, which hurt him in more ways than one. But his appetite dwindled again gradually, and he came home early and tired each afternoon

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toward the spring of 1907 and lay down to read or rest. And yet he was active, helping his friends more eagerly than ever, interested in projects for an up-to-date hospital — alas, so much needed in St. Louis. He consulted architects — his cousin, Louis Spiering, and Mr. Isaac Taylor — in regard to plans, means, etc., for an ideal institution, and conferred with others about financing the undertaking.

He also had in contemplation the writing of an article on appendicitis — a summing up, as it were, of his ideas and experience on the subject. It was to have been dedicated to his former assistants. I found the opening sentences as given below, together with a list of thirty-five names of men who, as assistants of his and thereafter, had become proficient. Illness and death interrupted the completion of this gracious testimonial. I feel that knowledge of the intention should reach those whom he indicated, and, therefore, give this fragment as I found it:

This is probably the last contribution I shall make to the literature of appendicitis and its treatment. I wish to dedicate it to my former assistants and pupils. Their names are contained in the adjoining list. It is largely due to them that I was enabled to do so much work. Many of them now occupy most enviable positions among the surgeons of this country, and I desire to say that the results that have been

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obtained are as much due to their efforts, in many instances, as to my own. I take pride in saying that probably not in a single instance was one dose of opium or morphin given to any patient under my orders for a period of time extending over twenty years. The same is true of strichnin, belladonna, digitalis, and other poisons.

Dr. Cottam, writing to me after his death, says :

It was through me he became affiliated with the Western Surgical Gynecological Association in 1899, and I remember that he thanked me for it just as though the honor and the benefit of his membership were not all ours.

Further on, in the same letter, Dr. Cottam writes :

Word of his indisposition came to me many months ago, and so last winter, when my wife and I were returning from a meeting in the South, we made it a point to stop off in St. Louis and we spent a memorable couple of hours with him. I told him of a project of mine to get up a "Festschrift" for him, but he would not hear of it. "Not until I am dead, Cottam," was all the response he would make to the suggestion, although he did finally agree to furnish me sometime with the names of twelve or fifteen who would be creditable contributors to the volume.

It was then that, reversing the order of things, he decided to write the article to be dedicated to his pupils, quoted above.

In the spring he again began to look thin and wan, and to have at intervals short, sharp attacks of a cramping, and for moments terribly

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painful sensation about his heart. Angina pectoris he called his trouble. To me the name did not bear the ominous significance I now know it sometimes has, because uncle Charles had suffered from this disease for many years before his death, and had succumbed finally to a different cause. And so I was mercifully blind to the indications that August was to be with me only a little while longer. Unaccountably blind, it seems to me now — and yet mercifully. Knowledge would have broken me utterly, and left me without strength for either of us to lean upon.

It was at noon on May 17th that he came home, as during late years he had done several times, in suffering and alarm. We sent at once for Dr. Graves, who prescribed only absolute rest. He seemed better all the afternoon, and would not hear of my recalling the invitations to dine informally I had sent to a few friends. He ate heartily, too heartily, of the giant Belleville asparagus of which he was always fond. Then he slept, or dozed rather, and seemed to be easy until one o'clock the following morning, when the attacks of horrible pain were renewed at frequent intervals.

There followed hours of such intense, heart-rending suffering that to think of them even now is to live over again his unbearable torture. He

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demanded chloroform to deaden the pain, and, after consulting Dr. Graves by telephone, he was given it. But Dr. Graves' consent to the use of the anodyne was, of course, qualified by the caution to administer as little as possible. Over and over again during the anguish of that night I wished that neither of us might survive it. Besides the almost unendurable suffering I had to look upon, unable to alleviate it, there was on me the fearful responsibility of giving only just enough of the drug to benumb and quiet. My cousin Charles Döring and my nephew Eric helped me faithfully during part of the night. But their work called them inexorably in the morning, and I knew they could ill spare the loss of sleep; so I sent them away after a time. I wonder that my hair did not turn white with the agony of it — the Doctor at frequent intervals waking up at the unremittingly cruel renewal of the pain, and clamoring, struggling, pleading for more of the drug than I dared to give him.

On the following morning an expert nurse was obtained, who had exact instructions and possessed the training and assurance I lacked. Gradually the attacks grew less frequent, and on the third and fourth days he was so much better that I could put the thought of his impending death from me

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once more. He saw his friends and former assistants, talked surgery with them with some of his wonted alertness, and waxed angry at being prohibited smoking and his matutinal coffee. Indeed, being denied the latter he took as a tragedy, as a cruel infliction, an injustice, and a personal insult. All his life he had been accustomed to a very large cup, sometimes two, of the strongest brew for breakfast, and to abstain, to substitute milk or cocoa, seemed to him an incredibly preposterous deprivation.

On the fifth day he seemed a great deal better. He got out of bed repeatedly, walked about, and looked out of the windows into the sunshine of the beautiful May morning. The nurse asked to be excused all afternoon. I read to him for a while from the *Zukunft*. Then he wearied of listening and took the magazine, a very light one, himself. I established myself with some mending on a couch near his bed, and we were chatting about German art between the sentences he slowly and emphatically read aloud now and then from an article. Suddenly he dropped the book, gasping and struggling for breath as never before. I sprang to him, holding him in my arms, crying for help. Desperately I tried to ease him, but I knew in my heart that all was vain. The maids came running at my

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cry, and telephoned for Dr. Bartlett, but, although he jumped into a machine that stood ready and sped over the six blocks from his house to ours in a few minutes, before he entered the room the great heart that was my brother's had ceased to beat.

Even now, that nearly five years have passed since that afternoon, I am not able to speak of it with the calm that the opinions I hold would seem to imply. Much less can I write of it—when there is no one by to put me on my mettle, to appeal to my self-control.

Let me, then, state baldly what the Doctors told me after the autopsy. Dr. Graves gave as the cause of death aneurysm of the heart. Dr. Bartlett, at my request, wrote the following lines to explain exactly what happened: "In the course of arteriosclerosis the left coronary artery became plugged, resulting in acute ischemia of the muscular area supplied by it. The consequence of this was rupture of the anterior wall of the left ventricle, the pericardium being found filled with blood in the autopsy."

He probably knew what was imminent. His blood pressure had been from 240 to 245 for a long time (the normal being from 120 to 130), and his pulse at times extraordinarily high. He had seen Professor Simon, his first master in surgery, die un-

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der similar circumstances — others, no doubt, since then. Grandly he maintained himself when he felt the approach of the Destroyer he had so often worsted in the fight for other lives, and knew that for himself there was no hope of foiling him. Generous and considerate as ever, he spared me the knowledge he must have had, and — coward that I was — I suffered him to do so.

The papers had a great deal to print about the manner of his last rites. They were of my devising, and in accordance with the tenets he had held firmly all through life to the edge of dissolution. There was not between him and me, in those last days preceding his death, speech or discussion of any kind in regard to the disposal of his remains or the ceremony of his funeral. We avoided such subjects. In happy days of perfect health he had casually expressed the wish that friends, and not strange, hired priests, give him the last salute.

It needed not this injunction. Would there have been any meaning in our long communion if in death I could have mocked him with that which, as long as he drew breath, he had spurned as false?

And so, amidst a great concourse of those to whom the name and the form of A. C. Bernays had been the synonym of high scientific and humanitarian ideals, F. W. Lehmann and Dr. C. Barck,

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loyal friends of long standing, spoke of his life and of his service with the sincerity and the simplicity that were befitting. Then his body was committed to the flames.

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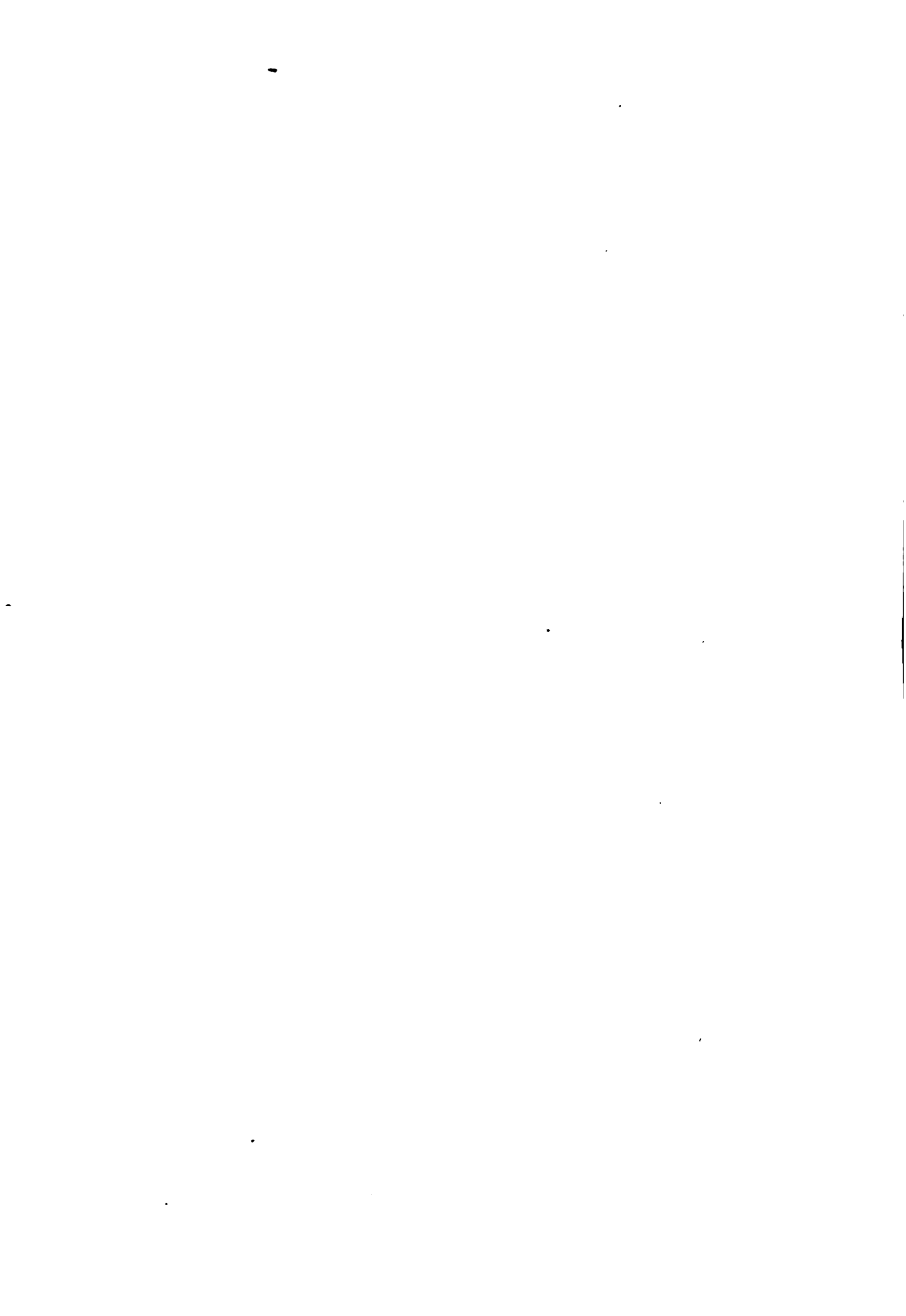
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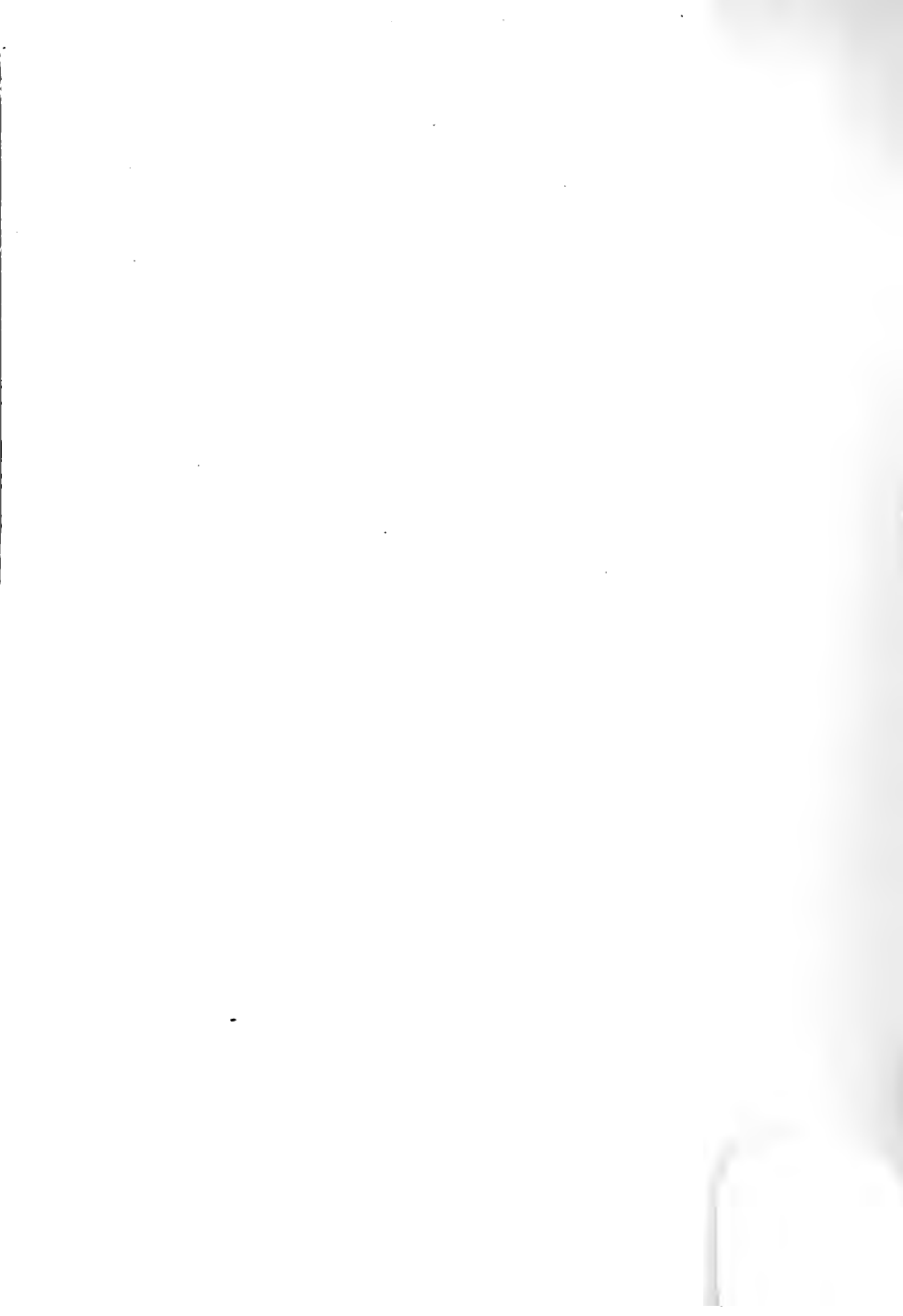
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